VOL. II.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1908.

No. 396.

WILLIAM R. WILLCOX ET AL., CONSTITUTING THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK FOR THE FIRST DISTRICT, APPELLANTS,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK.

No. 397.

THE CITY OF NEW YORK, APPELLANT,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK.

No. 398.

WILLIAM S. JACKSON, AS ATTORNEY GENERAL OF THE STATE OF NEW YORK, APPELLANT,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK.

APPEALS FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

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1 U. S. Circuit Court, Southern District, N. Y. Filed June 24, 1907. John A. Shields, Clerk.

Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before: Arthur H. Masten, Special Master.

NEW YORK, *July* 16, 1906.

Appearances.

Shearman & Sterling, Esqs., for complainant; John A. Garver, Esq., and Carl A. Mead, Esq., of counsel.

Hon. Julius M. Mayer, Attorney General of the State of
2 New York, solicitor for defendants Mayer and Gunnison, Davies and Shedden, as the Commission of Gas and Electricity; Alfred R. Page, Esq., and Howard S. Gans, Esq., of counsel.

Robert C. Taylor, Esq., solictor for William Travers Jerome.

Hon. John J. Delany, Corporation Counsel, for the City of New York; Wiiliam P. Burr, Esq., of counsel.

Mr. GARVER: I do not intend to make any formal opening in this matter, but I think possibly it may be helpful to state generally what we consider as the problem before us on this hearing. The suit that we have brought in this case is a rather novel one in this jurisdiction, and I do not think this rate question has ever before been raised in the courts of this State in connection with a public service corporation of this kind. Those questions have been raised largely as the result of the Granger legislation in the West, and they nearly all have been considered and passed upon by the Federal Courts in the western jurisdiction. While the question involved here is a new one, as far as this circuit is concerned, it seems to me that the principles upon which we shall have to proceed on this hearing are comparatively simple, and they are very much such as Masters in Chancery are entirely familiar with. As I look at it, it is largely a question of principal and income on one side; the burden is upon us to show what is the reasonable value of the investment which we have employed in this gas manufacturing business; that is really our principal account. Following that we shall be obliged to show what our income is and what expenses are legitimately chargeable against the income in the manufacture of this product, the price of which the Legislature has sought to regulate. The cases hold
3 that in estimating the value of the property invested in the business the present value must be taken into consideration;

that seems to be the general conclusion reached by the Supreme Court of the United States in the leading cases and we are prepared to stand generally on that ground, although in arriving at that question of value the evidence that has to be given is allowed with a good deal more latitude than is the case in ordinary condemnation proceedings. As you know, in condemnation proceedings very little evidence usually is allowed to be put in on the question of cost; but in these proceedings the Supreme Court of the United States has expressly held that that is a proper element to be considered. Of course, everything depends upon the peculiar facts in each case. If a corporation had recently been organized so that its manufacturing plant was a comparatively new one, why, the question of cost would be the primary one, probably, to be taken up, the question of cost in installing that plant. Where a business has been running as long as the business of this complainant, which was originally established in 1825, we cannot of course go back to the original sources, but we shall have to content ourselves with showing the present value of the property invested in that business and then such other elements as it is proper for the Court to take into consideration in fixing the price to be charged for the product which we manufacture. And, of course, there are a good many considerations that have to be considered there that do not enter into the ordinary condemnation proceeding, and the general principle is stated in the leading case of Smyth *v.* Ames, 169 U. S. In that case the Supreme Court said that in order to ascertain that value, that is the value of the investment in the business, "the original cost of construction, the amount
4 expended in permanent improvements, the amount of market value of its bonds and stock, present, as compared with the original cost of production, the probable earning capacity of the property under particular rates prescribed by statute and the sum required to meet operating expenses, are all matters for consideration and are to be given such weight as may be just and right in each case."

Now, included in the value of the property invested in the business in the case of a public service corporation of this kind, will be the value of the special franchises of the company, and also included in that value will be, as we shall maintain, the value of the good will of a business which has been established as long as this has, and which is operated in one of the great commercial centers of the globe, and that has been recognized by the courts, and in fact has been commented upon by Judge Lacombe in his recent opinion. They have never shown what the value of all our property is, taking into consideration, as the courts have held in a number of cases, the market value of the stocks and bonds. That may not have any direct bearing, but it has an indirect and very helpful bearing upon the general problem to be considered—that is, whether, taking all the circumstances and conditions into consideration, the rate fixed by the Legislature is a reasonable one.

In showing what the income from our business is, we shall not attempt to go back beyond the last year for which we have the accounts made up. Evidently, if the present value of the plant and investment is to be taken into consideration, the court must be limited to

the present revenue received at the old rate from the operation of the company. I do not mean to say that if, for instance, we show what the cost has been during the year 1905, or during the period that was selected before the Legislative Commission, that that could not be supplemented by showing any changes that have taken place since that particular account was made up; I only mean to indicate generally the limitation that we cannot go back indefinitely to see what the operating expenses were, because, of course, the court must be limited by the conditions which prevail at the present time.

We had hoped in reading our evidence in, our formal evidence, that we should be able to read in evidence the testimony that was taken before the Legislative Commission; that has been printed and we have it here now in bound volumes, and there was some negotiation to that end, but counsel for the defendants think we ought to present our case in a legal manner, and I shall therefore not attempt to make our record from the Gas Commission record, though I think probably we can save a good deal of time as we go along in the mere formal matters that were contained in that record.

I offer in evidence the consolidated agreement of September 29, 1884, by which the present company was formed. This was an agreement between the New York Gas Light Company, the Manhattan Gas Light Company, the Metropolitan Gas Light Company of the City of New York, the Municipal Gas Light Company of New York, the Knickerbocker Gas Light Company and the Harlem Gas Light Company.

Received in evidence and marked Complainant's Exhibit 1.

Mr. GARVER: I offer in evidence Chapter 85 of the Laws of 1823, being an act entitled "An act to incorporate the Gas Light Company of the City of New York.

Received in evidence as Complainant's Exhibit 2, but not marked.

Mr. GARVER: I offer in evidence Chapter 313 of the Laws of 1837, being an act entitled "An act to amend an act entitled 'An act to incorporate the Gas Light Company of the City of New York,' passed March 26, 1823."

Received in evidence as Complainant's Exhibit 3, but not marked.

Mr. GARVER: I offer in evidence Chapter 424 of the Laws of 1855, being an act entitled "An act to amend an act entitled 'An act to incorporate the Gas Light Company of the City of New York,' passed March 26, 1823."

Received in evidence as Complainant's Exhibit 4, but not marked.

Mr. GARVER: I offer in evidence Chapter 59 of the Laws of 1830, being an act entitled "An act to incorporate the Manhattan Gas Light Company."

Received in evidence as Complainant's Exhibit 5, but not marked.

Mr. GARVER: I offer in evidence Chapter 163 of the Laws of 1847, being an act entitled "An act to provide for increasing the capital stock of the Manhattan Gas Light Company of the City of New York."

Received in evidence as Complainant's Exhibit 6, but not marked.

Mr. GARVER: I offer in evidence Chapter 89 of the Laws of
7 1852, being an act entitled "An act to increase the capital stock of the Manhattan Gas Light Company of the City of New York."

Received in evidence as Complainant's Exhibit 7, but not marked.

Mr. GARVER: I offer in evidence Chapter 543 of the Laws of 1855, being an act entitled "An act to increase the capital stock of the Manhattan Gas Light Company of the City of New York."

Received in evidence as Complainant's Exhibit 8, but not marked.

Mr. GARVER: I offer in evidence certified copy of the certificate of organization of the Manhattan Gas Light Company, dated December 31, 1867. This is a reincorporation of the company under the general laws of 1848, Chapter 37, pursuant to privilege conferred by Chapter 480 of the Laws of 1867.

Received in evidence and marked Complainant's Exhibit 9.

Mr. GARVER: I offer in evidence Chapter 545 of the Laws of 1855, entitled "An act to incorporate the Metropolitan Gas Light Company of the City of New York."

Received in evidence as Complainant's Exhibit 10, but not marked.

Mr. GARVER: I offer in evidence Chapter 476 of the Laws of 1881, being an act entitled "An act to provide for the payment of certain certificates of indebtedness of the Metropolitan Gas Light Company of the City of New York."

Received in evidence as Complainant's Exhibit 11, but not marked.

8 Mr. GARVER: I offer in evidence from page 1736, volume 3, of the proceedings before the Gas Commission, certificate of reorganization under the general laws of 1848 of the New York Gas Light Company, dated May 1, 1871.

Received in evidence as Complainant's Exhibit 12, but not marked.

Mr. GARVER: I offer in evidence from page 1745 of the same volume certificate of incorporation of the Harlem Gas Light Company, dated February 1, 1855.

Received in evidence as Complainant's Exhibit 13, but not marked.

Mr. GARVER: I offer in evidence from page 1747 of the same volume, certificate of increase of capital stock of the Harlem Gas Light Company, dated July 21, 1869.

Received in evidence as Complainant's Exhibit 14, but not marked.

Mr. GARVER: I offer in evidence from page 1787 of the same volume, certificate of incorporation of the Municipal Oxygen Gas Company of the City of New York, dated May 29, 1874.

Received in evidence as Complainant's Exhibit 15, but not marked.

Mr. GARVER: I offer in evidence from page 1789 of the same volume, order changing the name of the Municipal Oxygen Gas Company to that of the Municipal Gas Light Company, dated June 5, 1876.

Received in evidence as Complainant's Exhibit 16, but not marked.

Mr. GARVER: I offer in evidence from page 1791 of the same volume, certificate of increase of capital stock of the Municipal Gas Light Company of New York, dated March 3, 1880.

Received in evidence as Complainant's Exhibit 17, but not marked.

Mr. GARVER: I offer in evidence from page 1803 of the same volume, certificate of incorporation of the Knickerbocker Gas Light Company, dated June 24, 1876.

Received in evidence as Complainant's Exhibit 18, but not marked.

Mr. BURR: It seems to me there is a practical difficulty which exists here at this present moment that we ought to have understood and arranged about so as to save time. I understand that the Stevens Commission had during the examination an expert accountant making an examination of the books. Might not we be doing the same thing? Without an examination of these books and without an inspection of the plants by the engineers, we are not in a position to show exactly what the cost of the production and distribution of gas is in the City of New York. Now, if while we are conducting the examination we could have that done, it would facilitate matters.

The MASTER: That is a matter for the complainant to decide upon. If the complainant is willing, for your accommodation, to make such an arrangement, that is its affair; but as a matter of absolute right, of course, I have got nothing to say about it. You would have to prove your case in the ordinary way, getting evidence from the——

Mr. BURR: Well, I don't know, that was the reason we make the application here to examine the books and inspect the property, and whether we can do that before you or make the application before the court, or whether the complainant will be willing to facilitate matters without——

The MASTER: As far as I am concerned, I would have no power to require them to let you examine their plant or go through their books.

Mr. BURR: I merely call attention to it now at this early hour, because I can see some difficulty arising later on unless we are afforded an opportunity to make the examination I speak of.

Mr. GARVER: The complainant has been required to prove its case by formal and legal evidence, and the complainant's counsel does not feel called upon at this stage of the proceeding to enter into any stipulation or suggest any stipulation. It seems to me that when the defendants consider the method of putting in their evidence, they must adopt such plan for securing that evidence as seems to them advisable.

The MASTER: We will adjourn now till 2 p. m.

After Recess.

GILBERT FRANCKLYN, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. GARVER:

Q. You are employed by the Consolidated Gas Company?
A. Yes, sir.
Q. And you have charge of the real estate of that company?
A. Yes, I have.
Q. For how long have you had charge of the real estate?
A. Since, I think, 1901 or 1900; 1901, to be sure.
11 Q. Are you familiar with the real estate which that company holds in this city?
A. Yes.
Q. Have you attended personally to the payment of the taxes of that real estate during the past few years?
A. I have.
Q. Have you produced the deeds to the Gas Company of the land held by it?
A. Have I produced them? Yes, I have them here.

Mr. GARVER: I offer in evidence deed from the New York Gas Light Company to the Consolidated Gas Company of New York, dated November 10, 1884, the consideration stated being one dollar and other valuable considerations, recorded in the office of the Register of the County of New York, in Liber 1863 of Conveyances, page 22, on January 30, 1885.

Mr. GANS: I want to object to the introduction of any evidence of real estate owned by the Gas Company, except in so far as it shall be proved that that real estate is actually and necessarily used in the gas making business. I object to it on the ground that it is incompetent, irrelevant and immaterial.

Mr. BURR: I join in that objection.

The MASTER: I will allow it.

Exceptions taken by Mr. Gans and Mr. Burr.

The MASTER: It is understood that the foregoing objection, ruling and exception shall be deemed applicable to all subsequent deeds offered, without the necessity of repeating the same.

(The foregoing deed was received in evidence and marked Complainant's Exhibit 19.)

Mr. GARVER: I offer in evidence a deed from the Manhattan Gas Light Company to the Consolidated Gas Company of New
12 York, dated November 10, 1884, the consideration stated being one dollar and other valuable considerations, recorded in the office of the Register of the County of New York in Liber 1863 of Conveyances, page 27, January 30, 1885.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 20.

Mr. GARVER: I offer in evidence deed from the Municipal Gas Light Company to the Consolidated Gas Company of New York, dated November 10, 1884, recorded January 30, 1885, in the office

of the Register of the County of New York in Liber 1863 of Conveyances, page 44, the consideration being one dollar and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 21.

Mr. GARVER: I offer in evidence deeds from the Knickerbocker Gas Light Company to the Consolidated Gas Company of New York, dated November 10, 1884, recorded in the said Register's office on January 30, 1885, in Liber 1863 of Conveyances, page 46, the consideration being one dollar and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 22.

Mr. GARVER: I offer in evidence deed from the Harlem Gas Light Company to the Consolidated Gas Company of New York, dated November 10, 1884, and recorded in the said Register's office on January 30, 1885, in Liber 1863 of Conveyances, page 49, the consideration being one dollar and other valuable considerations.

The same objection, ruling and exception.

13 Received in evidence and marked Complainant's Exhibit 23.

Mr. GARVER: I offer in evidence deed from the Metropolitan Gas Light Company of the City of New York to the Consolidated Gas Company of New York, dated November 10, 1884, recorded in the said Register's office January 30, 1885, in Liber 1863 of Conveyances, page 33; the consideration being one dollar and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 24.

Mr. GARVER: I offer in evidence deed from Philip Wagner and wife to the Consolidated Gas Company of New York, dated March 16, 1892, and recorded in said Register's office on March 17, 1892, Block Series of Conveyances, Section 6, page 450; indexed under block number 1643 on the land map of the City of New York; the consideration stated being one dollar and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 25.

Mr. GARVER: I offer in evidence deed from same to same, bearing date the same day, recorded in same liber on the same date at page 451, the consideration stated being $65,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 26.

Mr. GARVER: I offer in evidence deed from Jacob A. Weil to the Consolidated Gas Company of New York, dated January 7, 1893, recorded in said Register's office in Block Series of Conveyances,

14 Section 6, Liber 12, page 394, indexed under block No. 1643, the consideration stated being $25,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 27.

Mr. GARVER: I offer in evidence deed from Emma Wood to the Consolidated Gas Company of New York, dated April 11, 1885, re-

corded in said Register's office in Liber 1870 of Conveyances, page 446, on May 5, 1885, the consideration stated being $25,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 28.

Mr. GARVER: I offer in evidence deed from Silas B. Brownell and wife to the Consolidated Gas Company of New York, dated March 3, 1902, and recorded in said Register's office on the same day in Block Series of Conveyances, Section 3, Liber 77, page 355; indexed under Block No. 70, consideration $1,000 and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 29.

Mr. GARVER: I offer in evidence deed from Benjamin Weed to the Consolidated Gas Company of New York, dated March 17, 1899, recorded in said Register's Office on June 23, 1902, in Block Series of Conveyances, Section 3, Liber 83, page 320, indexed under Block No. 952; consideration $30,000.00.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 30.

Mr. GARVER: I offer in evidence deed from Henry Fuldner to the Consolidated Gas Company of New York dated September 27,
15 1899, and recorded in said Register's Office on October 5, 1899, in Block Series of Conveyances, Section 3, Liber 64, page 348; indexed under Block No. 978; consideration $31,000.00.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 31.

Mr. GARVER: I offer in evidence deed from Michael John Farrell to the Consolidated Gas Company of New York, dated March 31, 1902, recorded in said Register's Office April 4, 1902, Block Series of Conveyances, Section 3, Liber 82, page 80; indexed under Block No. 978; consideration $1.00 and other valuable considerations.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 32.

Mr. GARVER: I offer in evidence deed from Frederic P. Forster, Referee, to the Consolidated Gas Company of New York, dated March 31, 1888, recorded in said Register's Office on April 4, 1888, in Liber 2134 of Conveyances, page 31; consideration $11,100.00.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 33.

Mr. GARVER: I offer in evidence deed from Ezra W. Miller and others as Executors to the Consolidated Gas Company of New York, dated April 8, 1897, recorded in the Clerk's Office of the County of Bergen, New Jersey, April 14, 1897, in Block No. 444 of Deeds, page 568; consideration $2,500.00.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 34.

Mr. GARVER: I offer in evidence deed from Henry Murray
16 to the Consolidated Gas Company of New York, dated February 7, 1898, recorded in the Office of the Register of New York County, on February 7, 1898, in Block Series of Conveyances, Section 4, Liber 58, page 383; indexed under Block Nos. 1071 and 1070; consideration one dollar and other valuable consideration.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 35.

Mr. GARVER: I offer in evidence deed from Eugene Higgins to the Consolidated Gas Company of New York, dated April 23, 1891, recorded in the office of the Register on September 4, 1891, in Block Series of Conveyances, Section 4, Liber 7, page 315, indexed under Block No. 1093, consideration $18,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 36.

Mr. GARVER: I offer in evidence — from Charles V. Lamb to the Consolidated Gas Company of New York, dated September 30, 1892, recorded in said Register's office on November 2, 1892, in Block Series of Conveyances, Section 4, Liber 17, page 406, indexed under Block No. 1093, consideration $7,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 37.

Mr. GARVER: I offer in evidence deed from Mary Behan and others to the Consolidated Gas Company of New York, dated January 27, 1892, recorded in said Register's office on the same date in Block Series of Conveyances, Section 4, Liber 1274, indexed under Block No. 1092, consideration $6,600.

The same objection, ruling and exception.

17 Received in evidence and marked Complainant's Exhibit 38.

Mr. GARVER: I offer in evidence deed from Catarine Diercks to the Consolidated Gas Company of New York, dated December 7, 1891, and recorded on the same date in Block Series of Conveyances, Section 4, Liber 8, page 308, in the office of the Register of the County of New York, indexed under Block No. 1092, consideration $6,600.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 39.

Mr. GARVER: I offer in evidence deed from Robert Auld to the Consolidated Gas Company of New York, dated May —, 1888, and recorded in said Register's office on May 23, 1888, in Liber 2140 of Conveyances, page 269, consideration $8,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 40.

Mr. GARVER: I offer in evidence deed from Edward Cooper and others, as executors of Peter Cooper, deceased, to the Consolidated Gas Company of New York, dated April 30, 1887, and recorded in said Register's office on May 11, 1887, in Liber 2059 of Conveyances, page 159, consideration $35,000.

The same objection, ruling and exception.

Received in evidence and Marked Complainant's Exhibit 41.

Mr. GARVER: I offer in evidence deed from Rosa Docter to the Consolidated Gas Company of New York, dated December 1, 1904, recorded in said Register's office the same day, in Block Series of Conveyances, Section 4, Liber 100, page 410, indexed under

18 Block No. 1156, consideration $100.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 42.

Mr. GARVER: I offer in evidence deed from Mary T. Constant and others as executors, to the Consolidated Gas Company of New York, dated September 2, 1890, and recorded in said Register's office on October 1, 1890, in Liber 2363 of Conveyances, page 71, consideration $7,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 43.

Mr. GARVER: I offer in evidence deed from Peter Reilly to the Consolidated Gas Company of New York, dated February 2, 1891, and recorded in said Register's office on February 5, 1891, Block Series, Liber 2, Section 6 of Conveyances, page 49, and indexed under Block No. 1683, consideration one dollar.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 44.

Mr. GARVER: I offer in evidence deed from Giuseppe Molea to the Consolidated Gas Company of New York, dated September 1, 1905, recorded in said Register's office on September 16, 1905, Block Series of Conveyances, Section 6, Liber 1, page 149, indexed under Block No. 1683, consideration one dollar and other valuable consideration.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 45.

Mr. GARVER: I offer in evidence deed from John D. Crim-
19 mins to the Consolidated Gas Company of New York, dated December 24, 1892, recorded in said Register's office December 28, 1892, Block Series of Conveyances, Section 7, Liber 13, page 4, indexed under Block No. 1999, consideration $235,000.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 46.

Mr. GARVER: I offer in evidence deed from the Mayor, Aldermen and Commonalty of the City of New York to the Consolidated Gas Company of New York, dated December 29, 1897, recorded in said Register's Office on December 31, 1897, in Block Series of Conveyances, Section 6, Liber 40, page 312; indexed under Block No. 1692; consideration $27,500.00.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 47.

Q. Have you made a map or chart showing the various pieces of real estate described in these deeds?

A. I have had such a map made, yes, sir.

Q. Is the map now shown you such map?

A. That is a blueprint; yes.

Mr. GANS: I think we ought to object to that on the grounds that Mr. Francklyn has not shown qualifications to prove that that is a correct map, unless we allow it to go in, subject to further proof.

Mr. GARVER: I have not proved it yet.

Mr. GANS: He is not competent to prove that.

The MASTER: I assume that is a preliminary question. I overrule the objection.

Exception taken by Mr. Gans.

Q. Have you compared this blue print, showing the various parcels of real estate here, with the deeds which have been of-
20 fered in evidence?

A. Yes; I have.

Q. Have you added the reference to the deeds yourself, or was that done by some one else?

A. It was done in my presence; it was done by some one else.

Q. And you have verified the reference in each case?

A. I have verified that twice.

Q. Can you state, from comparing the deeds with this blue print, that the diagrams shown on the blue print of the various parcels of real estate correctly represent the descriptions contained in the deeds respectively offered in evidence to-day?

A. Yes; I can.

Q. With the reference in each case to a particular deed?

A. Yes, the reference on that map to the deed which covers it.

Q. That runs through how many pages of this blue print?

A. 12 pages of blue prints that have been already referred to. There is one page that has not been referred to.

Q. The pages Nos. 1 to 12, inclusive, you mean?

A. Pages 1 to 12, inclusive.

Q. Take page No. 1, for instance. What does this first part of the real estate at the top represent?

Mr. GANS: I object to that, if your Honor please. I do not think this witness is qualified to testify as an expert draughtsman with respect to the accuracy of this paper, or what it represents. It may be that we can come to an agreement that will permit this diagram to go in but it ought not to go in in this way until we have had some opportunity to examine it and waive, if we choose to waive, the proper technical form of proof.

Mr. GARVER: If this is not proper technical proof, I do not know what is.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

21 A. It represents a piece of property at the corner of Lexington Avenue and 116th Street.

Q. Conveyed by whom to whom?

A. Philip Wagner and wife to the Consolidated Gas Company of New York.

Q. Is that the property that is described in the deeds Exhibits No. 25 and No. 26?

Mr. GANS: I make the same objection.

The same ruling and exception.

A. It is the property described in a deed which was handed in just now; I do not recall the number.

Q. Take the next piece lower down. What does that represent?

A. The next represents an L-shaped piece of property at the corner of Third Avenue and 114th Street.

Q. Conveyed by whom to whom?

A. Part of it was conveyed by the Harlem Gas Light Company to

the Consolidated Gas Company of New York, and part of it was conveyed by Jacob Weil to the Consolidated Gas Company of New York.

Q. That is one of the deeds offered in evidence to-day?

A. One of the deeds offered in evidence to-day.

Mr. GANS: I presume my objection holds good to this line of questions.

The MASTER: Yes, the same objection holds good to all these questions, and the exception.

Q. And that is true to all other parcels of real estate on that page?

A. Do you wish me to go into detail about them?

Q. No.

A. These are deeds that have been handed in to all these pieces of property.

Q. And they correctly represent the property as described in these deeds?

A. They correctly represent the property as described in these deeds.

22 Q. And that is true as to all the parcels represented?

A. Yes, sir.

Q. On the other pages, through to page 12, inclusive?

A. It is true that the deeds cover all that property, but the deeds cover a little more than that property. There are some cases where the company does not now own all the property covered by the deeds.

Q. Then on this chart you have placed only the land included in these deeds which the company at present owns?

A. Exactly.

Q. Some portions of the land described in these various deeds have been sold and conveyed by the company?

A. Some portions have, yes, sir.

Q. And this chart represents accurately the parcels of land that still remain and are at present owned by the Consolidated Gas Company?

Mr. GANS: I object to that as not the best method or the proper method of proving that claim.

The MASTER: As to whether they are at present owned?

Mr. GANS: Yes.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

Mr. GARVER: I offer in evidence pages 1 to 12, inclusive of this blue print, for the sake of convenience in referring to this property.

Mr. GANS: I object to the introduction of this Exhibit as not properly establishing what it purports to set forth, the witnesses not having been properly qualified.

Objection overruled; exception taken by Mr. Gans.

Pages 1 to 12 are received in evidence as Complainant's Exhibit 48, and so marked.

23 Q. Have you obtained the appraised values of the parcels of land included in this blue print, Exhibit 48, from the official records for the present year, 1906?

A. I have; yes, sir.

Q. Taking this blue print, can you say, following the parcels in their order, and beginning at the top of page 1, what is the appraised value of those respective parcels for the year 1906?

A. I can do so.

Mr. PAGE: Appraised by whom?

Mr. GARVER: The official appraisal for the purpose of taxation by the City of New York.

Mr. PAGE: Do you mean the rate at which this is assessed for taxation?

Mr. GARVER: Yes, the assessed value for taxation.

Mr. GANS: I object to it as incompetent, irrelevant and immaterial.

Mr. GARVER: Of course it is not conclusive evidence, but it is some evidence of value. Under the present system the property is supposed to be assessed at its full value. Of course, we know as a matter of fact, and I think as a matter of fact we have judicial knowledge that that may not be quite true in New York County, it is perhaps a little less than the full value, placed for the purpose of appraisal for taxation, but we do not intend to stop with this. We merely offer this as some evidence of the value of our real estate.

The MASTER: Ordinarily, of course, assessed valuation is no evidence of the value of real estate. I will exclude it, Mr. Garver, and he can answer the question so that it will go on the record.

(After argument.)

Exception.

The MASTER: The answer will have to be taken, of course; you will get the fact on the record.

24 A. (Continuing:) This first piece of land on the map, at 116th Street and Lexington Avenue, is assessed under three different lots, Block No. 1643, Lots 56, 57 and 58. The total of these three lots is $53,500.

By Mr. BURR:

Q. The total assessment you mean?

A. Yes, land with improvements; total assessment. The next piece is at the corner of 114th Street and Third Avenue. That is assessed under two different lots, Block No. 1642, lots 32 and 33, amounting to $95,000. May I ask as to whether you want the total of the land with improvements? The City values it in two ways, land alone and land with improvements.

By Mr. GARVER:

Q. I do not care anything about improvements in taxation; you had better give the land values alone.

Mr. PAGE: I think that if this witness is allowed to testify as to copies of official figures, we had better have both of them. I do not see how it is competent to prove city assessments by putting a witness on the stand who says that he has been up there and has made his calculations, and they are thus and so. If they are going to offer

evidence as to assessed valuation, the best evidence is the books from which the valuations are taken.

Mr. GARVER: A sworn copy is perfectly good evidence, and this is a sworn copy.

Mr. PAGE: Of an official document?

Mr. GARVER: Certainly; there are various ways of proving official documents. It is very rare that the original is produced; we
25 can produce a certified copy, or we can produce a verified sworn copy, or produce the witness who has examined it and can state that it is a true copy. I have no objection to your putting the rest in evidence.

Mr. PAGE: I shall object to any partial statement.

Mr. GARVER: This is no partial statement. It is a statement of the land values. I have not said anything about improvements thus far. If you want to put in the others, it is for you to do.

Mr. PAGE: No, I will not; if you are offering a record of the valuation——

Mr. GARVER: No, I am not offering a record of the valuation. I am examining a witness, and am not asking him as to particular parcels. I am not offering any record in evidence.

Mr. GANS: A moment ago Mr. Garver was offering a sworn copy of a record; now it turns out that he has been examining a witness.

Mr. GARVER: I have been examining a witness.

The MASTER: Why do you not allow Mr. Garver to examine his witness or put in his abstract showing these facts subject to verification. What is the point? In an action of this kind, proceeding in this way in a Master's Office, being technical about these rules of proof, who gains anything by it? It is not to be presumed that Mr. Garver falsifies these records from the office of the Commissioners of Taxation and Assessments. If he is wrong it is easy enough for you to show it. Why should we go to the expense and delay and trouble here of bringing down a cab full of these enormous books simply for the purpose of seeing if Mr. Garver has made a legal proffer
26 of the assessed valuations of the company's property in the City of New York?

Mr. GANS: I do not think your Honor gets the point of our objection. The point is not in regard to the method of proof in evidence, where it is subject to correction, but the point is that he is not to be permitted to put in part of the record; if he is to put in a record he is to put in the whole of it.

Mr. PAGE: We do not wish to be charged with the duty of putting in the value of these lands with the improvements. He ought not to be allowed to put in the value of this land alone, he should put in the whole record as it stands. There are two assessments; the first is one the land alone, and the other is with improvements; that is, the entire property.

Mr. GARVER: I think I ought to be permitted to put this in in my own way. If you want to put it in, there is the witness on cross-examination, and it is easy enough to put it in. I do not think I ought to be forced to put it in in a way to suit you.

Mr. GANS: Your Honor catches the point? It is a record he is putting in.

Mr. GARVER: It is not a record. The witness has a right to refresh his recollection by referring to a memorandum.

Mr. GANS: But it is an incompetent way of proving a record.

Mr. GARVER: I insist that it is a perfectly competent way of proving it. So far as that is concerned, there is nothing incompetent about that method of proof.

Mr. PAGE: If you insist that it is competent, I will object then on the ground that it is not the best evidence.

27 The MASTER: Does this memorandum here show both the valuation of the land alone and the land with improvements?

Mr. GARVER: Yes.

The MASTER: What is the objection to putting in both of them?

Mr. GARVER: I don't like to be forced to put in something out of order and which I don't think it is advisable to present in that way.

Mr. GANS: Our point is this: If he had the original record here he could not put in part of that record without putting in the rest of it. When he puts in a sworn copy of a record, he cannot be in any better position than offering the original.

Mr. GARVER: Certainly, if the original were here I would proceed to offer that—one column of land values; that is exactly what I would have a right to do and you could proceed to offer in evidence the next column, if you so desired. I can offer in evidence one sentence from a paper, if I wish to, the same as I could the whole paper. I am not required to put in the entire document every time I produce a document. I put in what I consider to be relevant to the issues.

The MASTER: I do not see what difference it makes, because it is all a matter of record that either side can get at. As this evidence has been excluded on your objection, I will allow Mr. Garver to proceed and develop it.

Mr. GANS: Exception.

The WITNESS: The next parcel is land at the corner of 114th Street and Third Avenue, conveyed to the company by the Harlem Gas Light Company and Jacob Weil; the assessed value of this in 1906 is $49,000.

28 The next parcel is at the corner of Irving Place and 15th Street, conveyed to the company by the Manhattan Gas Light Company, M. L. Wood and Silas B. Bromwell; the assessed value is $175,000.

The next parcel is at the corner of Elizabeth and Hester Streets, conveyed to the company by the New York Gas Light Company; the assessed value is $107,100.

The next parcel is between 17th and 18th Streets, between Avenues B and C (that was on page 2 of the map), conveyed to the company by the Manhattan Gas Light Company; the assessed value is $179,000.

The next parcel is on the south side of 15th Street, between Avenues A and B, conveyed to the company by the Manhattan Gas Light Company; the assessed value is $20,000.

The next parcel is between 14th and 15th Streets, west of Avenue C, conveyed by the Manhattan Gas Light Company; the assessed value is $275,000.

The next parcel is between 14th and 15th Streets, Avenues C and D, conveyed by the Manhattan Gas Light Company; the assessed value is $350,000.

The next parcel is between 15th and 16th Streets, east of Avenue C, conveyed by the Manhattan Gas Light Company; the assessed value is $155,000.

The next parcel is between 15th and 16th Streets, west of Avenue D, conveyed by the Manhattan Gas Light Company; the assessed value is $90,000.

The next parcel is between 14th and 15th Streets, from Avenue D to Tompkins Street, conveyed by the Manhattan Gas Light Company; the assessed value is $180,000.

The next parcel is between 15th and 16th Streets, Avenue D to Tompkins Street, conveyed by the Manhattan Gas Light Company; assessed valuation is $115,000.

The next parcel is the bulkhead between 14th and 15th
29 Streets, East River, conveyed by the Manhattan Gas Light Company; the assessed value is $35,000.

The next parcel is the bulkhead between 15th and 16th Streets, East River, conveyed by the Manhattan Gas Light Company; the assessed valuation is $35,000.

On page 3. The first parcel is between 19th and 20th Streets, west of the marginal street, conveyed by the Manhattan Gas Light Company; assessed value is $95,000.

The next parcel is between 18th and 19th Streets, Tenth Avenue and the marginal street, conveyed by the Manhattan Gas Light Company; the assessed value is $332,000.

The next parcel is between 17th and 18th Streets, Tenth Avenue to the marginal street, conveyed by the Manhattan Gas Light Company; the assessed valuation is $285,000.

The next parcel is between 16th and 17th Streets, Tenth Avenue to the marginal street, conveyed by the Manhattan Gas Light Company; the assessed value is $225,000.

The next parcel is on the north side of 18th Street between 9th and 10th Avenues, conveyed by the Manhattan Gas Light Company; the assessed value is $32,000.

The next parcel is on the south side of 18th Street, between 9th and 10th Avenues, conveyed by the Manhattan Gas Light Company; the assessed value is $90,000.

On page 4. The first parcel is between 21st and 22nd Streets and First Avenue and Avenue A, conveyed by the New York Gas Light Company; the assessed value is $500,000.

The next parcel is between 20th and 21st Streets, west of Avenue
A, conveyed by the New York Gas Light Company and by
30 Benjamin Weed; the assessed value is $340,500.

The next parcel is on the south side of 20th Street, between First Avenue and Avenue A, conveyed by the New York Gas Light Company; the assessed value is $50,000.

The next parcel is between 21st and 22nd Streets, Avenue A and the marginal street, conveyed by the New York Gas Light Company; the assessed value is $351,500.

The next parcel is between 20th and 21st Streets, from Avenue A to Avenue B, conveyed by the New York Gas Light Company, by F. P. Foster, Referee, by Henry Fuldner and wife and by Michael John Farrell; the assessed valu- is $369,000.

The next parcel is between 20th and 21st Streets, Avenue B and the marginal street, conveyed by the New York Gas Light Company; the assessed value is $86,000.

On page 5. The next parcel is on the north side of 42nd Street, between 11th Avenue and the Hudson River, conveyed by the Metropolitan Gas Light Company; the assessed value is $50,000.

The next parcel is between 41st and 42nd Streets, from 11th Avenue to the Hudson River, including the bulkhead of the pier; the assessed value is $600,000.

The next parcel is on the north side of 42nd Street, between Tenth and Eleventh Avenues, conveyed by Henry Murray and wife to the Consolidated Gas Company; the assessed value is $38,000.

The next parcel is on the north side of 41st Street, between 10th and 11th Avenues, conveyed by the Metropolitan Gas Light Company; the assessed value is $58,000.

The next parcel is property at Shadyside, on which I have no valuation in the city, and I don't think I have any assessed value
31 of that, so I will leave that out.

Mr. BURR: You spoke of a piece of property containing bulkhead and pier.

The WITNESS: From 41st Street to 42nd Street, and from 11th Avenue to the Hudson River.

Mr. BURR: Was that acquired through the deed you have offered here?

The WITNESS: Yes, sir; acquired through deed of the Metropolitan Gas Light Company, and while the pier is assessed separately by the city from the land, it is all in one piece in the map, and I have added them together. If you prefer them separately, I will give you that.

Mr. GARVER: I have no objection to giving them separately.

Mr. GANS: It might be well to mark that paper for identification when the witness is through, and it will have everything on it.

The WITNESS: I don't think you could understand it.

Mr. BURR: I would like to have that particular piece of property divided.

The WITNESS: The land in that property between 41st and 42nd Streets, from 11th Avenue to the Hudson River is $525,000; the bulkhead and pier is assessed in a separate lot at $75,000. I have not given the block and lot numbers in each case; if it would be more convenient I can do that.

Mr. GARVER: No, proceed as you have been doing.

32 The WITNESS: Page 6. The next parcel is between 45th and 46th Streets, from 11th Avenue to the Hudson River, conveyed by the Municipal Gas Light Company by Edward Cooper, Executor, etc., and by Eugene Higgins and by Charles V. Lamb; the assessed value is $250,000.

The next parcel is between 44th and 45th Streets, from 11th Avenue to the Hudson River, conveyed by the Municipal Gas Light Company, by M. Behan, Catharine Diercks and by Robert Auld; the assessed value is $315,000.

The next parcel is the bulkhead between 45th and 46th Streets on the Hudson River, conveyed by the Municipal Gas Light Company; assessed at $75,000.

The next parcel is the bulkhead between 44th and 45th Streets and Hudson River, conveyed by the Municipal Gas Light Company; assessed at $75,000.

Page 7. The next parcel is between 62nd and 63rd Streets, between First Avenue and Avenue A, conveyed by Metropolitan Gas Light Company; the assessed value is $125,000.

The next parcel is between 60th and 61st Streets, on the west side of Avenue A, conveyed by the Metropolitan Gas Light Company; the assessed value is $156,000.

The next parcel is on the northwest corner of Avenue A and 60th Street, conveyed by the Metropolitan Gas Light Company; the assessed value is $15,000.

The next parcel is between 65th and 66th Streets, Amsterdam Avenue to West End Avenue, conveyed by the Metropolitan Gas Light Company; the assessed value is $500,000.

The next parcel is on the south side of 65th Street, between West End and Amsterdam Avenues, conveyed by Rosa Docter; the assessed value is $21,000.

The next parcel is between 65th and 66th Streets, from West End Avenue to the New York Central Railroad tracks, conveyed
33 by the Metropolitan Gas Light Company; the assessed value is $140,000.

Page 9: The next parcel is from 98th and 99th Streets, from 1st to 2nd Avenues, conveyed by the Knickerbocker Gas Light Company; the assessed value is $365,000.

The next parcel is from 98th to 99th Streets, from First Avenue to the marginal street, conveyed by the Knickerbocker Gas Light Company and by the City of New York; the assessed value is $130,000.

Page 10: The next parcel is between 110th and 111th Streets on the west side of First Avenue, conveyed by the Harlem Gas Light Company and by Mary T. Constant, as executrix; the assessed value is $282,000.

The next parcel is between 110th and 111th Streets from First Avenue to Pleasant Avenue, conveyed by the Harlem Gas Light Company; the assessed value is $285,000.

The next parcel is the pier and bulkhead between 110th and 11-th Streets and the Harlem River, conveyed by the Harlem Gas Light Company; the assessed value is $30,000.

The next parcel is between 111th and 112th Streets west of First Avenue, conveyed by the Harlem Gas Light Company; by Peter Riley, and by Guiseppe Molea and wife; the assessed value is $67,000.

Page 11: The next parcel is between 132nd and 133rd Streets, east of 12th Avenue, conveyed by John D. Crimmins; the assessed value is $265,000.

The next parcel is on Broadway or Kingsbridge Road and Jerome Avenue, conveyed by the Harlem Gas Light Company to the Consolidated; the assessed value is $91,000.

Q. What is the total assessed value for the year 1906 of those parcels of land, exclusive of the land improvements?

A. $8,508,100.

34 Q. Do you know what was the assessed value of the special franchises of the Consolidated Gas Company for the year 1906?

Mr. GANS: That is objected to as incompetent, immaterial and irrelevant.

Mr. BURR: Same objection on behalf of the City.

Mr. GANS: Assessed value of special franchises if your Honor please——

Mr. GARVER: For the purposes of taxation.

The MASTER: That I will also exclude, Mr. Garver.

Exception to Mr. Garver.

Mr. GANS: I want to add to the grounds of my objection that there is no proof of the existence of any special franchises, and therefore no foundation for that question.

Mr. GARVER: That may be.

The MASTER: As regards the special franchises, I may say now to a certain extent they stand upon a different footing than the real estate, and as the case develops later and you put in your proof, whatever it may be, I don't know, it may be it would be quite proper, in my judgment, for Mr. Garver to put in his own proof, if you did not, of what these franchises were assessed at. That may or may not be so; however, for the present I will follow the ruling made in the case of the real estate and exclude it, and then the witness will answer it and it goes on the record.

The WITNESS: The amount assessed against the Consolidated Company for special franchises in 1906 was $31,900,000.

Q. Do you know what portion of that represented mains
35 & 36 and services in the streets, that is, represented tangible property?

Mr. GANS: Do you mean assessed as tangible property?

Mr. GARVER: Yes.

The WITNESS: I don't know. There was another figure of $1500 in the column under mains, services, and so on.

Q. This was the total?

A. This is against the Consolidated Company.

Q. Which included the mains and services?

A. There is a note under that referring to other companies.

Q. But this total of $31,900,000 represented the total amount assessed by the State Board for the year 1906 for special franchises of the company?

A. Yes, sir.

Q. Now, in those special franchises are included the tangible property in the streets; that is, the mains and the services. Do you know what portion of that $31,900,000 was included, or were they not separated?

A. I don't know, sir; they were not separated; that is simply the one figure.

Mr. GARVER: I think that is all with this witness now. There is one question open, but it is now 4 o'clock. Perhaps we had better suspend here. Is there any cross-examination of this witness?

Mr. PAGE: Oh, yes, we will have some.

Mr. GANS: We might wait, then, until the next session.

Hearing adjourned to July 17th, 1906, at 11 A. M.

Last Exhibit:

Complainant's 48.

37 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before: Arthur H. Masten, Special Master.

TUESDAY, *July* 17, 1906, 11 a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

38 GILBERT FRANCKLYN resumes the stand for further examination:

Direct examination by Mr. GARVER:

Q. Mr. Franeklyn, I call your attention to page 3 of the blueprint, Complainant's Exhibit 48, showing certain real estate west of Tenth Avenue, between 16th and 20th Streets, bounded on the west by a marginal street. That is where the 18th Street plant is located, is it not?

A. Yes, sir, it is.

Q. And this marginal street is the new street that is being opened by the city there?

A. It is.

Q. The deeds that were offered in evidence yesterday, the Consolidated Gas Company, showed land between 10th and 11th Avenues, did it not, comprising——

A. (Interrupting.) Tenth and Eleventh Avenue, and west of Eleventh Avenue.

Q. West of Eleventh Avenue, between 11th and 13th Avenues?

A. Between 11th and 13th Avenues and the bulkheads.

Q. Have you a blueprint showing what was conveyed by that deed?

A. Yes, sir (producing same).

Q. Does the paper now shown you correctly represent the land that was conveyed to the Gas Company and that was included in that 18th Street plant?

Mr. GANS: We make the same objection as made before, on the ground that the witness is not qualified to testify to that.

Objection overruled; exception.

A. Yes, sir; that represents the property.

Q. The portion tinted blue?

A. The portion tinted blue. The bulkheads are not tinted, but they were also conveyed in that deed.

Q. The bulkheads between 16th and 18th Streets?

A. Between 16th and 17th Streets and 17th and 18th
39 Streets; I don't think the bulkheads at the foot of the street were conveyed.

Q. And the portion of the land included there west of the easterly line of the marginal street is the portion that the city is taking in the condemnation proceedings now pending?

A. Yes, sir.

Q. Do you happen to know whether the city has paid for that land, paid the company for that land which it has taken in this proceeding?

A. I understand it has not paid.

Mr. GARVER: I offer that blueprint in evidence.

Received in evidence and marked Complainant's Exhibit 49.

Q. Those condemnation proceedings are still pending before the Commissioners, are they not?

A. I am not familiar with that, Mr. Garver.

Q. Have you the deeds conveying the land at Astoria?

A. Yes, sir.

Q. Will you produce them?

The witness produces certain deeds.

Mr. GARVER: I am anticipating a little; perhaps it is not strictly in order to offer these deeds now until we show the connection between the Astoria Company and the Consolidated Company, but that we shall do later, and I thought it would be more convenient while Mr. Francklyn was on the stand to prove these instruments.

I offer in evidence deed from John D. Crimmins to the Astoria Light, Heat & Power Company, dated January 21, 1899, and recorded in the Queens County Clerk's office on January 24, 1899, in Liber 1211 of Deeds, page 112; the consideration being $750,000.

Mr. BURR: The same objection is made to that that was
40 made yesterday, because we object to the introduction of any evidence regarding any real estate which is not actually in use for the production and manufacture of gas; it is not claimed that the property in Astoria is used for any such purposes.

Mr. PAGE: It is further objected to; this is a deed to the Astoria Light, Heat & Power Company, a separate and distinct corporation from the complainant; it has no connection with any of the issues.

The MASTER: I assume those matters will all be connected later; I will overrule the objection.

Messrs. Gans, Page and Burr except.

Mr. GANS: The same objection, ruling and exception will apply to all these deeds, I presume?

The MASTER: Certainly.

Received in evidence and marked Complainant's Exhibit 50.

Mr. GANS: As to the connection being shown later, I think it will not be shown there in any other connection between the Astoria Light, Heat & Power Company and the complainant here than that the complainant owns all or a controlling interest in the stock of the Astoria Light, Heat & Power Company and has financed the latter with the funds with which its plant has been built, so that the only relation which the Astoria Light, Heat & Power Company will be shown to bear to the complainant here is that the complainant has as part of its investment the ownership of the stock and bonds of this company, and possibly some notes. In other words, from our
41 point of view it would be quite as pertinent to foreshadow that they were going to prove that they owned United States bonds and then prove the ownership by the United States of the site on which a custom house was located and the value of that custom house.

The MASTER: Possibly if the United States were engaged in making gas in the custom house it might be relevant.

Mr. GANS: If your Honor bases the ruling on that ground, we have no objection to make.

Mr. PAGE: Would your Honor hold the offer in evidence of deeds of the Standard Gas Company to be competent here to show what this company owns?

Mr. GARVER: We shall show a much more intimate connection than that; we shall show that this plant is put up for the purpose of supplying gas to the Consolidated Gas Company, and that the connections are being made for that express purpose.

The MASTER: I will allow the testimony. In a proceeding of this kind I will say at the outset that no narrow or technical rule will prevail, and it is customary, at least in my practice in equity cases, to take anything that apparently has any reasonable bearing on the questions at issue.

Mr. PAGE: I wish to state on behalf of the State that this is not

a narrow and technical objection, but in my opinion a substantial one.

Mr. BURR: And I say on behalf of the City that the objection is a substantial one to the introduction of any testimony regarding any property not used in the production and distribution of gas.

Mr. GARVER: We cannot prove everything in a minute. Now, I offer in evidence deed from Daniel Mashin to the Astoria
42 Light, Heat & Power Company, dated February 16, 1899, and recorded in the Queens County Clerk's office on February 20, 1899, in Liber 1212 of Deeds, page 65; the consideration being $1 and other valuable considerations.

Same objection as to the prior deed offered in evidence.

Same ruling and exception.

Received in evidence and marked Complainant's Exhibit 51.

Mr. GARVER: I offer in evidence deed from Hans Peterson to the Astoria Light, Heat & Power Company, dated March 7, 1899, and recorded in the Queens County Clerk's office in Liber 1213 of Deeds, page 14, on March 13, 1899; consideration $1 and other valuable considerations.

Same objection, same ruling; exception.

Received in evidence and marked Complainant's Exhibit 52.

Mr. GARVER: I offer in evidence deed from Patrick Ward to the Astoria Light, Heat & Power Company, dated March 23, 1899, and recorded in the Queens County Clerk's office on March 25, 1899, in Liber 1213 of Deeds, page 281; consideration $50,000.

Same objection, same ruling; exception.

Received in evidence and marked Complainant's Exhibit 53.

Mr. GARVER: I offer in evidence letters patent from the People of the State of New York to the Astoria Light, Heat & Power Company, dated December 12, 1899, and recorded in the Book of Patents No. 50, page 381, and in the Queens County Clerk's office on December 28, 1899, in Liber 1227 of Deeds, page 2423; consideration, for the promotion of commerce.

43 Same objection, same ruling; exception.

Received in evidence and marked Complainant's Exhibit 54.

Mr. GARVER: I offer in evidence deed from Clarence N. Platt to the Astoria Light, Heat & Power Company, dated July 30, 1900, and recorded on July 31, 1900, in the Queens County Clerk's office, in Liber 1239 of Deeds, page 266; consideration $1.

Same objection, same ruling; exception.

Received in evidence and marked Complainant's Exhibit 55.

Mr. GARVER: I offer in evidence deed from Edwin North to the Astoria Light, Heat & Power Company, dated September 30, 1901, and recorded in the Queens County Clerk's office on October 31, 1902, in Liber 1289 of Deeds, page 300; consideration, $1 and other valuable considerations.

Same objection, same ruling; exception.

Received in evidence and marked Complainant's Exhibit 56.

Mr. GARVER: I offer in evidence deed from William V. Clark to the Astoria Light, Heat & Power Company, dated December 24,

1901, and recorded in the Queens County Clerk's office on July 25, 1902, in Liber 1282 of Deeds, page 390; consideration, $1 and other valuable considerations.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 57*a*.

Mr. GARVER: I offer in evidence deed from the Consolidated Gas Company of New York to the Astoria Light, Heat & Power Company, dated July 18, 1902, and recorded on July 23, 1902, in the Queens County Clerk's office in Liber 1282 of Deeds, page
44 341; consideration $1 and other valuable considerations.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 58.

Mr. GARVER: I offer in evidence deed from Alexander S. Williams to the Astoria Light, Heat & Power Company, dated March 10, 1904, recorded in the Queens County Clerk's office on August 11, 1905, in Liber 1383 of Conveyances, page 257; consideration $1 and other valuable considerations.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 59.

Mr. GARVER: I offer in evidence letters patent from the People of the State of New York to the Astoria Light, Heat & Power Company, dated May 12, 1904, and recorded in the Book of Patents No. 54 page 28.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 60.

Mr. GARVER: I offer in evidence deed from Edwin S. Bennett to the Astoria Light, Heat & Power Company, dated December 21, 1904, and recorded in the Queens County Clerk's office on January 25, 1905, in Liber 1381 of Conveyances, page 84; consideration $1 and other valuable considerations.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 61.

Mr. GARVER: I offer in evidence deed from Frederick N. Gilbert to the Astoria Light, Heat & Power Company, dated March 24, 1903, and recorded in the Queens County Clerk's office on April 27, 1903, in Liber 1301 of Conveyances, page 238;
45 consideration $1 and other valuable considerations.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 62.

Mr. PAGE: I move to strike out all the exhibits from 50 to 62, except Exhibit 58, on the grounds already stated in our objections to their reception in evidence.

Motion denied; exception.

Q. Does the preliminary page of Complainant's Exhibit 48, the blue prints, show the property which is conveyed to the Astoria Light, Heat & Power Company?

Mr. GANS: Objected to on the ground that the witness is not competent to testify to the fact.

Objection overruled; exception.

A. Yes, sir; it shows the property conveyed.

Mr. GARVER: I offer that in evidence.
Same objection; same ruling; exception.
Received in evidence and marked Complainant's Exhibit 63.

Q. Did you personally compare the descriptions in the deeds with this diagram?
A. Yes, sir.
Q. What is the total acreage included in the deeds that have been offered in evidence, the deeds to the Astoria Light, Heat & Power Com; any?

Mr. GANS: Same objection as to the competency of the witness to testify to that fact.
Same ruling and exception.

A. 376 acres is the total of upland and land under water.

46 Cross-examination by Mr. PAGE:

Q. How long have you been in the employ of the Consolidated Gas Company?
A. Since 1895.
Q. And your present position is what?
A. I have charge of their real estate.
Q. What is your title? Have you any?
A. I haven't any.
Q. When you say you have charge of their real estate, what do you mean by that?
A. I attend to such matters as buying and selling, and any small pieces of property rented I attend to, I have charge of the renting of offices for the Company, and general supervision of all their real estate matters, especially tax matters in regard to real estate.
Q. You have introduced a number of deeds here from various corporations to the Consolidated Gas Company dated on November 10th, 1884. That was the date of the organization, was it not, of the Consolidated Gas Company?
A. I believe it was, yes, sir.
Q. Have you introduced in evidence deeds of all the real estate that was conveyed by the constituent companies to the Consolidated Gas Company at that time?
A. Yes.
Q. Has some portion of that property been sold that was deeded to the company at that time?
A. Yes, certain portions have been sold.
Q. Those portions that have been sold do not appear upon this diagram, Complainant's Exhibit 48, do they?
A. No, sir.
Q. Have you anything that will show such real estate as was conveyed by the constituent companies to the Consolidated Gas Company at the time of the organization, that has since been sold?
A. That map, Exhibit No. 48, shows some of it; it shows certain portions.

Q. You may take Exhibit 48, if you will, and indicate such portions as were conveyed by the constituent companies and have since been sold?

47

Mr. GARVER: The witness testified yesterday that Exhibit 48 shows the lands now held by the Gas Company, after conveyances made since 1884.

The WITNESS: But there are some portions here designated, of property that has been sold; for instance there. (Indicates on page 2.)

The MASTER: Describe it so that it will appear on the record.

Q. A portion of the block between East Fifteenth and East Sixteenth streets and Avenues C and D, that is not colored; that has been sold by the Consolidated Gas Company.

A. That is right.

Q. To the New York Edison Company?

A. Yes.

Q. Can you give us the date of that sale?

A. I think it was in 1904 or 1905; I could not be sure of that, but I can get you the exact date.

Q. Is there any other property shown upon the map, Exhibit No. 48, that has been sold by the Consolidated Gas Company?

A. There are several portions that have been taken in condemnation proceedings by the city.

Q. They are not shown on this map?

A. Yes, they are shown on the map in a way; there is a note on the map to that effect.

Q. Will you indicate just what portions?

A. On page 3 there is a note to the effect that the property west of the line on the marginal street was taken by the city in condemnation proceedings, and this exhibit, No. 49, shows the property as deeded by the Manhattan Gas Light Company to the Consolidated Gas Company.

Q. Is there any other portion?

A. On page 4 of Exhibit 48 there is a note "bulkhead taken by city in condemnation proceedings." That is part of the property which was deeded by the New York Gas Light Company to the Consolidated Gas Company. On page 7 there is a note "deeded by the Consolidated Gas Company to the Standard Gas Light Company."

48

Q. That is the property in the blocks bounded by East 62d and East 63d Streets, between First Avenue and Avenue A?

A. Yes. That property was conveyed to the Consolidated Gas Company by the Metropolitan Gas Light Company. On page 10 of Exhibit 48 there is a note, on the block between 111th and 112th Street-, First Avenue and Pleasant Avenue, "Taken by the City in condemnation proceedings." This property was deeded by the Harlem Gas Light Company to the Consolidated Gas Company. On page 10 again there were some portions of land deeded on blocks between 111th and 112th Streets, First Avenue and Second Avenue; there were some small pieces of property sold to the Consolidated Gas

Company in exchange for other property. Those sales were made to Peter Reilly and Giuseppe Molea and wife. That was done to straighten out a line.

Q. One would offset the other?

A. Just about.

Q. That is all that is shown by Exhibit 48?

A. Yes.

Q. Could you prepare for us a statement showing what properties have been sold by the Consolidated Gas Company that were originally purchased by the constituent companies and that do not appear upon Exhibit 48?

A. I can. Do you mean a map or a statement such as I have given it here?

Q. A statement will do.

A. Is this not a sufficient statement?

Mr. PAGE: I suppose we can check it.

The WITNESS: Or I can have one made.

49 Q. This property was taken by the city for the purpose of a marginal street at Eighteenth street, that was the Eighteenth street plant which was conveyed by the Manhattan Gas Light Company, was it not?

A. It was part of it.

Q. The company does not operate that Eighteenth street plant at this time, does it?

A. No, sir.

Q. And therefore the remaining portion is not at present in use by the company?

A. Some of it is.

Q. What part of it?

A. All the parts that contain gas holders.

Q. Will you indicate upon the map, page 3 of Exhibit 48, just what portion of that is now in use?

A. The portions between Nineteenth and Twentieth streets east of the marginal street is in use.

Q. Being 190 feet and 8 inches on Twentieth street and 119 feet on West Nineteenth street?

A. Yes, sir.

Q. Extending across the block?

A. Yes.

Q. And that is all the property that is now used by the company in its business?

A. That is all of that particular piece. Then the piece between Eighteenth and Nineteenth streets west of Tenth avenue.

Q. How much of that block is used?

A. There are holders there. It is difficult to divide off exactly how much is in use there and how much is not; there are two gas holders there on the Tenth avenue front.

Q. How many gas holders are there on the marginal street front?

A. Two.

Q. What other holders have you there?

A. There are two holders in the property on the south side of

Eighteenth street between Tenth and Ninth avenue; that I think is all the holders that are in use. There are other portions of the property used for various purposes.

Q. Can you indicate for what purposes, and what portions
50 are used?

A. There is a stable on the north side of Eighteenth street between Ninth and Tenth avenues, which is used as an automobile garage and stable.

Q. To store the automobiles belonging to the company?

A. I believe so.

Q. I mean, it is not rented for that purpose?

A. No, sir; there are various buildings on the block 17th and 18th Street west of 10th Avenue, used as machine shops, and for various other purposes, which I could not designate more particularly as I am not familiar enough with them.

Q. Will you turn to the property at 60th and 61st Street, between Avenue A and 1st Avenue; you have already testified about that?

A. Yes, that is sold.

Q. What is the property between 60th and 61st Street- used for?

A. At present, there are wooden houses standing on that property which are rented.

Q. Then there is no manufacturing gas plant there now?

A. There is not.

Q. That was originally the manufacturing plant of the Metropolitan, was it not?

A. I think not, sir.

Q. Well, that in connection with 42nd Street?

A. It was owned by the Metropolitan.

Q. And the only use that is put to is for renting some of the buildings?

A. At present, yes, sir.

Q. What is the property at Shadyside?

A. That is a piece of property that was deeded by the Metropolitan to the Consolidated Gas Company; it was used for a great many years for getting rid of the refuse and ashes of the various companies; there was a large amount of land built out in that way that is now rented.

Q. It is not used now in any way?

A. Not by the Consolidated Company.

Q. Now, there was some property conveyed by the Harlem
51 Gas Light Company to the Consolidated Gas Company; is that shown on Exhibit 48?

A. Yes.

Q. As far as you know, except the small portions that you have testified to, has any of that property on 110th and 111th Street- been sold by the Consolidated Gas Company, except these little portions that you have spoken of, and that which was taken by the City?

A. So far as I know, no sir. None has been sold except those portions that I have mentioned; certainly none has been sold since I have had anything to do with them.

Q. Have you shown the property at Kingsbridge Road near Inwood on this Exhibit 48?

A. Yes, sir.

Q. What use is that put to?

A. There is a small gas-holder on one portion of it, and there is a house occupied by the man in charge and used as a valve house.

Q. The bulkhead at Avenue A and East River as specified here has been taken by the City, has it not?

A. No, sir; the bulkhead between 110th and 111th Streets still belongs to the Consolidated Gas Company.

Q. There has been one bulkhead taken there?

A. I think not.

Q. Does the bulkhead belong to you, between 111th and 112th Streets, which originally belonged to you?

A. I think not, but I would not like to be quite sure of that without referring to the deed.

Q. The tunnel of the New Amsterdam Gas Company is on this property, is it not?

A. No, sir.

Q. What tunnel is that?

A. There is no tunnel there.

Q. I call your attention to Exhibit 48, page 10, the tunnel between 110th and 111th Streets and Pleasant Avenue, tunnel shaft, radius twenty feet, and then on the margin, "Easement of property
52 granted to the East River Gas Company;" what do you call that?

A. There is no tunnel there. There is an easement of property granted to the East River Company, but there is no tunnel.

Q. Can you state when the 18th Street plant ceased to operate?

A. No, sir; I could not tell you.

Q. Yesterday when you testified to certain assessment valuations you had with you a memorandum, had you not?

A. I had.

Q. Have you it with you now?

A. Yes. (Produces memorandum.)

Q. Was this memorandum prepared by you from the official tax records of the city of New York?

A. Yes, it was.

Q. And is a correct transcript of the figures appearing upon the records?

A. Yes.

Q. You testified yesterday to the valuation in the first column, land alone?

A. I did.

Q. Was there also upon the record another column, land with improvements?

A. Yes, sir.

Q. Did you copy from the record the figures appearing in that column?

A. I copied both.

Q. And as they appear upon this memorandum they are correct?

A. They are correct.

Mr. PAGE: I would like to have this marked for identification, or the witness might read it in evidence. I am willing to offer it at this time.

Mr. GARVER: I should not object to the order, but I have another objection.

The MASTER: How do you wish it designated; how do you wish to distinguish between the parties interested?

Mr. GANS: For convenience we might say "State" and "city" exhibits.

Mr. GARVER: If you offer it in evidence I want to take a formal objection.

53 Mr. GANS: Of course it is offered subject to objection, as to the competency and propriety of this whole line of proof. Your Honor will remember that the testimony was excluded but read in evidence, it seems to me, in view of the fact that the Court might decide otherwise than your Honor.

The MASTER: All that disposition of the case, of course, is tentative, and all I meant to say was that as the case stood yesterday at the outset, it did not seem to me that was a proper method of proving value, not, *non-constat,* but that later it may be perfectly proper for Mr. Garver to offer in evidence these assessed valuations; so any ruling is without prejudice to his application to renew it, and the same is true of you.

Mr. GANS: Therefore, it seems to me that we are entitled to the same privileges of cross-examination, to introduce as proper cross-examination the same matter that we would have been obliged to introduce had the evidence been admitted, and without any greater prejudice to our rights than would have been involved under the same circumstances. Therefore we offer it in that way.

Mr. GARVER: I cannot concede that proposition.

Mr. MATTHEWSON: You offer it under your own objection, you mean?

Mr. GANS: Subject to our rights, under our own objection.

Mr. GARVER: Make your offer and we will make our objection.

Mr. GANS: The offer is of this paper in evidence subject to our rights under the objection (and the ruling of the Master), that this line of evidence is not admissible.

54 Mr. GARVER: I object to it on the ground that it is offered conditionally and hypothetically, and also on the ground that it relates to subject matter which has been excluded on the direct evidence of this witness.

The MASTER: I will receive it, and without any conditions at all attached to it. The gentleman cannot offer it with strings tied to it; he offers it and it is admitted, but the record shows for itself what the conditions are.

Exception taken by Mr. Garver.

The assessment valuation paper, three sheets, is received in evidence and marked State Exhibit A.

Cross-examination by Mr. BURR:

Q. Will you be good enough to state, referring to the first page of Exhibit 48, how much of the 576 acres is under water, and how much is upland?

A. I think I stated 376 acres.

Q. I understood you to say 576?

A. No, sir; there are 376.09 acres; the up land acreage is 264.20 acres and the land under water 111.89.

Q. Referring to deed offered yesterday, from the Mayor, Aldermen and Commonalty to the Consolidated Gas Company of the City of New York, dated December 29, 1897, being the deed which was referred to yesterday and the conditions contained, which were read into the record, have you knowledge as to whether the conditions contained in that instrument have been complied with by the Consolidated Gas Company?

A. As far as I know, the city has never taken steps to have them complied with.

Q. That is not an answer to the question I asked you?

A. I do not think there were any conditions.

Mr. BURR: Will you allow me to look at the deed?

55 Mr. GARVER: You had better ask him for the fact instead of asking for a conclusion.

Q. This deed provided that the party of the second part, being the Consolidated Gas Company, was to, within a certain period, construct, build, erect, make and finish, or cause to be constructed, built, erected, made and finished, according to any resolution or ordinance of the party of the first part, the said Common Council or its successor, or the Board of Department of Docks, a good and sufficient street which shall form the northerly one-half part of 98th Street, and another good and sufficient street which shall form the southerly one-half part of 99th Street, said street lying contiguous to the premises hereinbefore described, and extending from the original line of high-water mark to the westerly side of the exterior street, wharf or place determined upon by the Department of Docks, and will fill in the same with good and sufficient earth, and regulate and pave the same and lay the sidewalks thereof, and also, by the terms of this deed, the party of the second part, the Consolidated Gas Company, agrees to keep and maintain in good order and repair such street and sidewalk. Do you know whether the Consolidated Gas Company did comply with those provisions contained in that deed?

Mr. GARVER: Objected to on the ground that it is shown that no such resolution as referred to in the deed has ever been adopted, and that therefore it is not shown that any duty was thrown upon the Gas Company.

Mr. BURR: I am asking him if he knows the actual fact, whether the company has ever complied with those conditions or not.

56 Mr. GARVER: Do not ask whether it has ever complied with them; you can ask whether it has ever done that.

Mr. BURR: He can say if he knows.

Mr. GARVER: I object to it as calling for a conclusion.

Objection overruled. Exception taken by Mr. Garver.

A. I do not know. I know that 99th Street is a street used and paved; whether it was made in compliance with that deed or not I do not know.

Q. You have no personal knowledge on the subject?

A. No, sir.

Q. Is it part of your duty as head of the real estate department of the Consolidated Gas Company to see that whatever terms and provisions are contained in a deed or grant of property to the company are complied with?

A. Yes.

Q. Have you taken any special pains to ascertain whether those provisions have been complied with by this company, as stated and set forth in this deed, Exhibit 47?

A. I do not know that there are any conditions to comply with.

Q. Will you give us the fullest information that you have upon the subject?

A. As far as I know, and I think I am correct in saying so, there has been no order from the Department of Docks, or the Aldermen, or any other city department causing those conditions to be complied with.

Q. Your understanding is that if a resolution is passed calling upon the company to carry out those conditions, that the company is obligated to carry them out?

Mr. GARVER: That is objected to on the ground that the witness is asked for the construction of a written instrument.

The MASTER: I will allow it.

Exception taken by Mr. Garver.

57 A. That would be my understanding, subject to the advice of counsel.

Q. And your best information is that no such resolution has been adopted by the Board of Aldermen or other municipal authorities?

A. That is my best information, yes, sir.

Q. You are the head of the real estate department?

A. I think so; there is nobody else that I know of.

Q. All the real estate owned and controlled by the Consolidated Gas Company is under your supervision?

A. All the real estate owned by the Consolidated Gas Company is.

Q. You draw a distinction between that owned and controlled; do you know of any controlled by the Gas Company that you have no control over?

A. I know of no real estate controlled but not owned by the Consolidated Gas Company.

Q. You have no knowledge of any real estate controlled but not owned by the Consolidated Gas Company?

A. No, sir, not unless you consider Astoria; you might draw that distinction between Astoria.

Q. How do you regard the Astoria property, as owned or controlled by the Consolidated Gas Company?

A. I should regard it as owned by the Consolidated Gas Company.

Q. To what do you refer by the distinction which might be drawn?

A. I thought you were trying to draw a distinction; I was not. You said "owned or controlled."

Q. You are quite positive that the Astoria property is owned by the Consolidated Gas Company?

A. I should consider it so, yes, sir.

Q. Upon what do you base that consideration?

The MASTER: How is that material? I do not wish to curtail your cross-examination in any way, but did it not appear here
58 yesterday that they owned all the stock of the Astoria Gas Company?

Mr. MATTHEWSON: All the stock, all the bonds and all the notes.

Mr. BURR: That was my understanding, but I wanted to get at what the witness knows about it.

The MASTER: How is it material what the witness thinks about it? he may be wrong. My object is to save time.

Mr. BURR: Very well.

Q. In your department do you keep a record or a book containing a list of property owned by the Consolidated Gas Company?

A. Yes.

Q. With the conveyances made by the Consolidated Gas Company of its real estate to other parties?

A. Such a record is kept; I have not any record of the real estate that has been conveyed away.

Q. Who keeps that?

A. It is hard to say that anybody keeps it, since there have been very few.

Q. No record is kept of the conveyances made by the Consolidated Gas Company to other corporations or individuals?

A. There have only been about three in my knowledge.

Q. Have you got a record of those three?

A. I can tell you what they are; I have not a record of them at present, no, sir.

Q. When was the conveyance to the Edison Light Company?

A. What is that?

Q. Can you recall offhand when that was made?

A. I think I testified that was made in 1904, or 1905; I am inclined to think it was 1905.

Q. Can you recall the consideration stated in the deed?

A. No, sir.

Q. Did you testify in the 18th Street condemnation proceeding?

A. No, sir.

59 Q. Have you testified at any of the proceedings brought to acquire any of the property in the Consolidated Gas Company?

A. No, sir.

Q. Do you buy property for the Consolidated Gas Company, or merely attend to the transferring of it to the company?

A. The company does not as a rule buy property; instances of buying property have been very few. I have attended to some few instances; they have been mostly small exchanges.

Q. You bought the property at Astoria?

A. I did not attend to that.
Q. You did not attend to that?
A. Except that I attended to the technical matter of checking over the deeds.
Q. Is there anybody else associated with you in the real estate department?
A. No, sir.
Q. You have read over the papers showing the assessed valuation of these various pieces of property?
A. Yes.
Q. In your testimony yesterday you referred to that paper?
A. Yes.
Q. That was a paper that was handed to you this morning by Senator Page?
A. That is the same one.
Q. The assessed valuation of that property, if I remember rightly, was given by you yesterday, was some $8,500,000, was it not?
A. I am sure it was $8,000,000; I am not sure about the odd amount.
Q. $8,508,000, is that right?
A. $8,508,100.
Q. Has the company made application to the tax Commissioners, to your knowledge, to reduce the assessment?

Mr. GARVER: That is objected to as irrelevant.
Objection overruled; exception taken by Mr. Garver.

A. I think there were some applications to the Commissioners in certain instances.
60 Q. Can you give us a list of those instances in which applications were made by the Consolidated Gas Company to the Tax Commissioners for reduction of the assessments to which you have testified, on the ground that such assessments were excessive?

The same objection, ruling and exception.

A. I have no such list.
Q. Where is such a list to be found?
A. I don't know, sir.
Q. By whom were such applications instituted?
A. They were instituted by counsel.
Q. Did they come to your knowledge, as being in charge of the real estate department?
A. Yes, I saw a good many applications; some were put in; some not.
Q. Did you sign them?
A. No, sir; I did not.
Q. Who signed them?
A. I think Mr. Gawtry signed them.
Q. Who is Mr. Gawtry?
A. Mr. Gawtry is Vice-President.
Q. Can you state now, without refreshing your recollection by examination of the books, how many such applications for reduction have been made by the company through Mr. Gawtry?

A. No, sir; I could not state.

Q. Mr. Gawtry is Vice-President of the Consolidated Gas Company?

A. Yes, sir.

Mr. GARVER: He has already testified to that.

Q. Can you procure and produce here a list of such applications, or give us copies of the applications, showing the property referred to, and when they were made?

A. I have no such copies, sir.

Mr. BURR: Will you produce them, Mr. Garver?

61 Mr. GARVER: I have no personal knowledge that any such exist. If you want to have any documentary evidence produced in this proceeding you must require its production in a legal manner.

Mr. BURR: I am glad to hear that; we know just exactly where we stand.

Q. Have you given any testimony, Mr. Francklyn, in these proceedings, or made any affidavits or statements whatever?

A. No, sir; I never have.

Q. This list which has been read over by you yesterday and today—was that made up from an examination of your books or from an examination of the books in the Tax Department?

A. It was made from an examination of the books of the Tax Department, coupled with an examination of *the* our books, to show which properties we owned; but the value figures are from the books of the Tax Department.

Q. And you mean to be understood as saying that at the same time you have no knowledge as to which of these parcels appearing upon that list are now subject to application for reduction of assessments?

A. No, sir; I have no knowledge.

Q. Are these the 1906 assessments?

A. 1906.

The MASTER: All such applications of necessity would be on file in your Department of Taxes and Assessments.

Redirect examination

By Mr. GARVER:

Q. You are not a lawyer, are you?

A. No, sir.

Q. Did the total of the assessed value of the lands which you gave yesterday, namely, $8,508,100.00, include the portion of the 18th Street plant west of the easterly line of the proposed marginal street?

A. No, sir, the figures I gave yesterday included what the

62 company now owns; that is all east of the easterly line of the marginal street.

Q. It did not include anything west of the easterly line of the marginal street?

A. Nothing west of the easterly line of the marginal street.

Q. And did it include the bulkheads?
A. It did not include the bulkheads.
Q. This Exhibit No. 48—does that show the bulkhead property owned by the Consolidated Gas Company?
A. It does not show it very clearly.
Q. Does it show any of the bulkhead property owned by the Consolidated Gas Company, Exhibit 48?
A. I do not think that anybody who did not know what the company owned in the way of bulkheads would be able to find out by this exhibit; in other words, it is not clearly marked.
Q. Can you take that, page by page, and state what bulkheads, if any, the company owns?
A. Yes.
Q. Which were included in the deeds offered in evidence yesterday?
A. Yes, on page 2 of Exhibit 48, the bulkheads from 14th to 15th Street, and from 15th Street to 16th Street on the East River, are both owned by the Consolidated Gas Company.

By Mr. MATTHEWSON:

Q. Are they colored blue on that map?
A. There is just a line; it is hard to color a bulkhead.
Q. They are not colored?
A. No, sir.

By Mr. GARVER:

Q. There is merely a line there; it is the bulkhead rights that the company owns?
A. It does not show here whether the company owns them or not. I testified to them yesterday as being deeded by the Manhattan Gas Light Company to the Consolidated Gas Company. On page 5, the bulkhead between 41st and 42d Street on the North River is
63 owned by the Consolidated Gas Company and was deeded by the Metropolitan Gas Light Company. On page 6, the two bulkheads, from 44th to 45th Street, and from 45th to 46th Street, are both owned by the Consolidated Gas Company and were deeded to it by the Municipal Gas Light Company. On page 10, the bulkhead between 110th and 111th Streets, is owned by the Consolidated Gas Company, and was deeded to it by the Harlem Gas Light Company. That I think is all in Manhattan. Perhaps I might mention that the Shady Side bulkhead is owned by the Consolidated Gas Company; that is, the bulkhead in New Jersey, at Shady Side, is owned by the Consolidated Gas Company.

By Mr. GANS:

Q. When you stated the bulkheads not being included in the assessments, in response to Mr. Garver's question, you meant merely the 18th Street bulkhead?
A. Yes, I meant merely the bulkhead which the City has already taken from the Company, at 18th Street.

By Mr. PAGE:

Q. Were the other bulkheads included in this assessment?
A. Yes.

By Mr. BURR:

Q. Do you rent any of these bulkheads?
A. Do we rent any of them? No, we use them all. You mean, do we rent any of the bulkheads which belong to us? We are renting other bulkheads from the city.
Q. I am asking, do you rent any bulkheads, or your rights over the bulkheads?
A. No, sir.

The MASTER: As lessor, you mean; you are not renting them out?

64 The WITNESS: No, we are not.

By Mr. GARVER:

Q. Do you lease any bulkheads from the city which are not included in Complainant's Exhibit 48?
A. We do.
Q. What bulkheads?
A. The bulkheads from 20th to 21st Street on the East River, and from 21st to 22nd Street on the East River; from 98th and 99th Street on the East River, and the bulkhead at the foot of East 15th Street on the East River; that is between our own two bulkheads, from 14th to 15th Street, and from 15th to 16th Street. I think that is all.
Q. Does the company rent any piers from the city?
A. They rent the north half of the pier at the foot of East 21st Street.
Q. Have you those leases with you, of those bulkhead rights, and piers?
A. No, sir.
Q. Can you obtain them?
A. Yes.
Q. On page 7 of Exhibit 48, in answer to a question by Senator Page, you refer to a piece of property deeded by the Consolidated Gas Company to the Standard Gas Light Company. That piece is not colored blue, is it?
A. No, sir; it is not colored blue.
Q. And that is true also of the property between 15th and 16th Streets, page 2, which is marked as deeded to the Edison Company?
A. The property sold is not colored blue.
Q. And is that true in every instance in this exhibit, where property has been sold, it is not colored blue?
A. That is true in every instance.
Q. Or where it has been taken by the city?
A. Or where property has been taken by the city; the blue coloring, in other words, shows all we own.
Q. At the present time?

A. Yes, sir.

65 Q. And only the part that is colored blue in Exhibit 48, is owned at present by the Consolidated Gas Company?

A. All owned at present by the Consolidated Gas Company; the part colored white is not, with the exception of those bulkheads, about which it is difficult to say as to whether they are colored or not colored.

Q. The tunnel referred to on page 10, between 110th and 111th Streets has never been constructed, has it?

A. No, I do not think anything has been done on it.

Q. There is a tunnel under the East River which is used for sending gas from Long Island City across to New York, is there not?

A. Yes.

Q. Where is that located?

A. That comes out at 71st Street, I think it is.

Q. And that extends across to the Ravenswood works?

A. That extends across to the Ravenswood works.

Q. Referring to page 3 of Exhibit 48, is not that portion of the property indicated there in blue, between 16th and 17th Streets and Tenth Avenue and the marginal street, used for a coal yard?

A. I do not think it is at present, but I have not been up there for some little time.

Q. Referring to Complainant's Exhibit 49, the bulkheads between 16th and 17th Streets and between 17th and 18th streets are not colored blue, either, are they?

A. No, sir; they are not colored blue. They did belong to the Consolidated Gas Company before these condemnation proceedings were started.

Q. The figures that you gave for the upland and for the land under water, at Astoria, do those represent the area at the time of the conveyances of the property to the Astoria Company, or does that represent the present physical condition of the property?

A. They were worked out by our drafting department;

66 and I suppose that the upland and land under water are continually changing, so that I would not say that represented it exactly as it is at present; they are the latest data I have at present.

Q. Are they filling in the land under water?

A. Yes.

Q. All the time? Is that going on constantly?

A. Yes.

Mr. GARVER: I want to offer in evidence sections 889 and 892 of the City Charter as amended by Chapter 454 of the laws of 1903.

Received in evidence as Complainant's Exhibits 64 and 65, respectively, but not marked.

(Here a recess was taken until 2 o'clock P. M.)

Afternoon Session.

GILBERT FRANCKLYN resumed the stand for further examination.

Direct examination by Mr. GARVER:

Q. Have you produced the leases to which you referred this morning?

A. Yes, sir.

Mr. GARVER: I offer in evidence lease from the city of New York to the Consolidated Gas Company of bulkheads between Twentieth and Twenty-first streets and Twenty-first and Twenty-second streets, East River.

Mr. GANS: That is objected to as irrelevant and immaterial.

Mr. BURR: Same objection.

Objection overruled. Exception.

Received in evidence and marked Complainant's Exhibit 66.

67 Mr. GARVER: I offer in evidence lease from the city of New York to the Consolidated Gas Company to the northerly half of the pier at the foot of East Twenty-first street.

Mr. GANS: Same objection.

Same ruling; exception.

Received in evidence and marked Complainant's Exhibit 67.

Mr. GARVER: I offer in evidence privilege granted by the Department of Docks to the Consolidated Gas Company to use and occupy the bulkheads at the foot of East 15th street, East River.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 68.

Mr. GARVER: I offer in evidence privilege granted by the Department of Docks to the Consolidated Gas Company to use and occupy the bulkhead between 98th and 99th streets, East River, dated April 26, 1906.

Same objection; same ruling; exception.

Received in evidence and marked Complainant's Exhibit 69.

Q. The Consolidated Gas Company is in possession of all this property included in those leases just offered in evidence?

A. Yes, sir.

Q. And is that true also of the property in Complainant's Exhibit 48, marked blue?

A. It is true with some slight exceptions where there are small pieces of property temporarily leased.

Q. That is the only exception?

A. That is the only exception. There are a few tenement houses and a few minor pieces of property of that kind.

Q. Where the Gas Company made a lease?

A. Yes. You would hardly call it a lease, they are occu-

68 pied from month to month, and the Shadyside property which I mentioned, that was leased.

By Mr. PAGE:

Q. What else is there besides the property at 110th Street which you state was leased?

A. 110th Street?

Q. 110th Street or 111th Street, that that was formerly used by the Harlem Gas Light Company?

A. I don't remember saying there was anything leased there, sir.

Mr. GARVER: I think it was 98th and 99th Streets.

Q. Where was it you stated there were some frame buildings that were leased?

A. 60th and 61st Street, there is the piece (indicating map); there are two frame buildings leased there, at least they are occupied from month to month.

Q. What other properties are there on that Exhibit 48 that are leased by the Consolidated Gas Company to other persons, either leased or now in the occupancy of other persons?

A. There are 4 or 5 lots between 17th and 18th Streets, between Avenue B and C, and which are leased to contractors for storing material. All these leases are so arranged that the property can be taken back in 60 days' notice; sometimes on 30 days' notice.

Q. Is it the property which is shown at the top of page 2?

A. Yes, sir.

Q. All of that?

A. No, sir; only a small portion of it.

Q. What is there on the balance, anything?

A. There are two gas-holders, and there is a storage yard occupied by our street department for storing pipe and fittings.

Q. What else is there there?

A. There are 4 or 5 lots on the plot between 18th and 19th
69 Streets, Tenth Avenue and marginal street, leased in the same way; those leases are for one year with the privilege of cancelling them at 60 days' notice. On page 4 there is a lot at the northeast corner of 20th Street and Avenue A, leased in the same way.

Q. By a lot do you mean 25 by 100 feet?

A. I think it is 70 feet deep, by, I think, 20 feet. It is a short lot; and on the east side of Avenue A, corner of 20th Street, northeast corner of 20th Street and Avenue A there are three tenement houses all of which are let out, the different floors are let out to tenants.

On page 6, the property between 44th and 45th Streets, 11th Avenue to the river, there are four tenement houses, all of which are let.

Q. Are they indicated on——?

A. No, one of them is here.

Q. Oh, is it on that side?

A. One of them is, and three on that side, that is three towards the easterly end of the property. They are 16 feet and a few inches in frontage, each of them on 45th Street and one on 44th Street is 25 feet. There is a tenement house on the south side of 65th Street, between Amsterdam Avenue and West End Avenue, 25 feet front, rented to various tenants.

There is a small house on the block between 98th & 99th Street, east of First Avenue, rented to one of our own workmen. I have omitted two small tenement houses, on page 4, westerly side of Av-

enue A, between 20th and 21st Street; there are two small tenement houses rented to various tenants.

Q. Would you take Defendant's Exhibit A and mark on that the properties that are under rental. Mark on that in some way so that we can distinguish them.

(Question withdrawn for the present.)

70 The WITNESS: On the south side of 112th Street, between First and Second Avenue, there are two city lots rented to an Italian for storing push cars, also on 60 days' notice. That is all that I can remember.

By Mr. BURR:

Q. Can you give us the rentals, a statement of the rentals that are derived from the property that you speak of as having been rented or leased?

A. I cannot give it to you, no, I cannot remember it.

Q. Can you get a copy of it or list of the rentals?

A. Yes.

Q. And furnish them here?

A. Yes, sir.

Q. Is there any vacant and unimproved property outside of the property you have described as leased?

A. Yes, there is.

Q. Will you let me have a list of the property from Exhibit 48?

A. There is a vacant piece of property at the corner of One Hundred and Sixteenth street and Lexington avenue, a considerable amount of property of what was formerly the Eighteenth street station which is not in use now. It used to be used for coal storage and coke storage, and various other things, and now the works are discontinued and it is not in use.

Q. That is outside of the property that has been taken by the city.

A. Outside of the property that has been taken by the city. And this property between Sixtieth and Sixty-first street, where there are two frame houses that I spoke of; it is a large piece of property and they only occupy a small portion of it, the rest of that is unoccupied, unimproved.

Q. On what page is that?

A. That is on page 7, and on the northeast corner of Avenue A and Sixtieth street there is a triangular piece of property which is unoccupied and unimproved.

71 There is a piece of property alongside of the tenement house in Sixty-fifth street, on page 8, which I do not think is yet occupied; there is a valve house being built there, but I think it has not yet been built.

There is a piece at the corner of First avenue and One Hundred and Eleventh street, on page 10, annexed to the stable, which is unoccupied; it is used for turning horses out in.

Between One Hundred and Thirty-second and One Hundred and Thirty-third streets, a piece of property there, there has been a holder built on one end of it, the rest of it is now unoccupied. And a part

of the property at Sherman avenue and Broadway where there is a small holder and a valve house; portions of that property are unoccupied.

Q. Would you say that all the property outside of those mentioned now are occupied and used by the Consolidated Gas Company in manufacturing gas?

A. I would say so, yes.

Q. Will you give us an account of the use of each particular piece of property?

A. Corner of One Hundred and Fourteenth street and Third avenue, I have mentioned the corner of One Hundred and Sixteenth street and Lexington street as being occupied—One Hundred and Fourteenth street and Third avenue.

By Mr. GARVER:

Q. Just a moment. That property at One Hundred and Sixteenth street and Lexington avenue, isn't that held for an office?

A. I have always heard that was the intention of the company, to build an office there.

By Mr. BURR:

Q. We are not dealing in intentions now but in actualities.

72 The question is what is it at present being used for?

Mr. GARVER: The question is what property we have and for what purpose we hold it. If we bought a piece of property yesterday for the purpose of building a holder on, I imagine the Court would hold that we bought it for gas manufacturing purposes.

Mr. BURR: Not if the holder was not needed for a series of years to come.

Mr. GARVER: That would be a question of law.

The MASTER: Proceed, gentlemen.

The WITNESS: The corner of 114th Street and Third Avenue, the Harlem office of the company is there, and behind it on 114th Street is the shop, fitting shop, and the next piece is the corner of Irving Place and 15th Street, that is the general office of the company and occupies the whole portion there. In the corner of Hester and Elizabeth Streets, that is occupied by the downtown office of the company and a shop, fitting shop and street department.

By Mr. BURR:

Q. What do you mean by fitting shop?

A. I mean a shop where the gas meters are sent out from and where the complaint work is attended to. And on page 2, the piece between 17th and 18th Streets is occupied by two gas-holders and by the street department; they have a storage yard there. A small piece here on the south side of 15th Street, I think it might be classed as unoccupied, it contains an old well which used to be used to get water from, I do not think it has been used of late, there is nothing else on the property except a pump house and well,

73 it is on the south side of 15th Street, between Avenue A and Avenue B; a piece betwen 15th Street and 16th Street, east

of Avenue C, has a large gas-holder on it; the piece between 15th and 16th Streets, west of Avenue D, is generally used for storing coke and other material. The same applies to the piece between 15th and 16th Streets, east of Avenue D. The piece between 14th and 15th Streets on the east side of Avenue C, which has gasholders and a meter house and a purifying house. Between 14th and 15th Streets, Avenues C and D, is the main block of the 14th Street works where the gas is made. Between 14th and 15th Streets, from Avenue D to Tompkins Street is for storing coal; then there are two bulkheads there in that station that are used for loading coal. On the 18th Street station, I think that is on the west side, that has been covered already by what I have said of that.

On page 4, 21st Street station, the block between 21st and 22nd Streets, First Avenue and Avenue A contains several gasholders, I think six, and a meter repair shop.

The piece between 21st and 22nd Streets, from Avenue A to the marginal street is the main block of the 21st Street works where the gas is made.

From 20th to 21st Streets, east of Avenue A, there is one holder and a large amount of coal stored. There is a shop, meter shop, the same kind of shop as I spoke of before—fittings; and there is a valve house, that is at the corner of 20th Street and Avenue A, southeast corner. The northeast corner of 20th Street and Avenue A I have mentioned already as being unoccupied; one small city lot there.

The block between 20th and 21st Streets, from Avenue A to Avenue B, contains purifying houses and coal sheds and a
74 meter house, besides three tenement houses I spoke of; and the piece between 20th and 21st Streets, from Avenue B to the marginal street is used for storing coal.

The piece on the south side of 20th Street, between First Avenue and Avenue A is a stable.

Q. A company stable?

A. A company stable; yes.

The piece from 41st to 42d Street from Eleventh Avenue to the river is the 42d Street works, contains holders and works, purifying houses and coal sheds.

—. The coal sheds there extend out on the pier, don't they?

A. They don't extend out on the pier, the coal sheds do not; there is some coal outside the sheds.

Q. That is where the Sandy Hook boats land, do they not?

A. They land at the pier at Forty-first street; they have a right of way there.

Q. They have a right of way over your place?

A. Yes.

Q. Well, don't you rent that to them?

A. That right of way, I don't think so.

Q. Did you give it to them free?

A. I think that we had an injunction, I believe, against their building a pier at Forty-first street and we waived that injunction; that is a legal question that I don't feel qualified to pass on.

Q. You don't know whether any rental is derived from that place or not?

A. I think not; no, I think there is no rental derived from that. And the piece on the north side of Forty-first street east of Eleventh avenue is used as a stable and also for storing material.

By Mr. GARVER:

Q. A company's stable?

A. Yes, sir. On the north side of Forty-second street west of Eleventh avenue is used for storing coke, made at the Forty-
75 second street works; and the same applies to a piece on the north side of 42d Street between 10th and 11th Avenue- for storing coke.

A piece from 44th to 45th Street and from 11th Avenue to the river, is the 44th Street works, where the gas is made, with the exception of the four tenement houses which I mentioned. It has five gas holders and also a coal shed.

The piece between 45th and 46th streets has two holders, a purifying house and a shop connected with the works, blacksmith shop and so on, and the company has a stable and a place for storage of material.

A piece of land between 62d and 63d streets and First avenue and Avenue A is occupied by a holder, a gas holder.

The piece between 60th and 61st street, as already mentioned, also the piece east of Avenue A at the corner of 60th street——

By Mr. GARVER:

—. That piece between 60th and 61st street- to which you referred is held for the purpose of placing holders on it?

A. I have always supposed it was held for that and always heard it so spoken of.

Page 8, a piece between 65th and 66th Street-, from Amsterdam to West End Avenue, is occupied by gas holders.

A piece on the south side of 65th Street I have already spoken of; it has a tenement house on it, and the rest of it is being prepared for a valve house.

The piece between 65th and 66th Street-, west of West End Avenue, is occupied by the Street Department for storing material, storing pipe, &c., and there is a fitting shop built on 66th Street.

76 By Mr. BURR:

Q. Do you get any pay from the Street Department?

A. I do not speak of the City Street Department, but of our own gas street department.

The piece between 98th and 99th Street is the main block of the 99th Street works and the piece between 98th and 99th Street east of First Avenue is used for those works for storing coal and other material.

The piece between 110th and 111th Streets, west of First Avenue, is occupied by two large gas holders and a valve house.

The piece between 110th and 111th Streets, east of First Avenue, is occupied by the Street Department, who use it for storing material; and the piece on the northerly side of 111th Street has the com-

pany's stable on part, and as I said before, part on the corner is vacant, and is used for turning horses out in.

By Mr. GARVER:

Q. Is that adapted for further extending the stable?

A. It is adapted for that; I think a new stable is in contemplation there, the old one has nearly fallen down; the two lots on 112th Street I have mentioned as being rented out for storage of push carts. The piece between 132d and 133d Street-, on 12th Avenue, a large holder has just been completed there and the rest of it I have mentioned as being vacant.

Q. Is that adapted for extensions?

A. Yes, sir; there is room for two more holders, the same as the one put up there, and I believe it is being held for that object.

And the property at Broadway and Sherman Avenue, which we call Innwood, I have already spoken of. That completes it.

77 By Mr. BURR:

Q. Are any of the holders you have referred to not used?

A. I think they are all in use, sir.

Q. Can you furnish us with a map showing the dimensions of the property that is actually occupied as you have so described it?

A. I suppose I can, yes.

Q. Showing the buildings and holders?

A. I haven't any map showing buildings and holders, no.

Q. Well, have you maps at your office showing that?

A. We have maps showing it to a certain extent, I don't know that we have any maps that are absolutely accurate as to that.

Q. Well, they are as accurate as you could get them to be?

A. I don't think so at all. I mean they have not been brought up to date.

Q. Will you furnish us a map, Mr. Francklyn, giving that information as fully as you may be able to?

Mr. GARVER: Counsel objects to this.

The WITNESS: I can designate on these maps which are tenement houses and which are rented.

Q. And the size of the houses, can you do that?

Mr. GARVER: We will show that by another witness, do not take any more time with Mr. Francklyn.

Mr. BURR: Very well, if you will do that.

WILLIAM H. BRADLEY, a witness called on behalf of the complainant, being first duly sworn, testified as follows:

Direct examination by Mr. GARVER:

Q. What is your age and occupation?

A. I am sixty-seven years old, sixty-eight next month. I
78 am chief engineer of the Consolidated Gas Company.

Q. How long have you been the chief engineer of the Consolidated Gas Company?

A. Since the first of January, 1886.

Q. And prior to that, what did you do?

A. I was an engineer with the Consolidated Gas Company for two years previous at the 44th street station, and for ten years previous to that time I was the engineer of the Municipal Gas Company, one of the companies that went in forming the consolidation.

Q. And you have been actually engaged as a gas engineer in the City of New York since about 1876?

A. About 1876.

Q. And prior to that time were you engaged in the same business?

A. Prior to that for many years I was engaged in the construction of gas works and gas machinery.

Q. Since your connection with the Consolidated Gas Company in 1884, have you had general charge and supervision of the construction and maintenance of the work of your company?

A. Since I took charge as chief engineer in 1886. From 1884 to 1886 I still remained with what is now known as the 44th Street station, but in January, 1886, I took charge of the entire Consolidated Gas Company, and since that time I have had entire charge of it.

Q. You are then familiar with the plans of the manufacturing plants of the company and the holders and the capacity of the various plants and their physical condition?

A. I am.

Q. Will you state what manufacturing plants the Consolidated Gas Company has, where they are located and the character of the plants and the capacity generally?

A. At the foot of 14th street, East River, is what is known as the 14th street station, and that is a coal gas manufacturing plant of the capacity of five million five hundred thousand feet per day. At the foot of 42d street, North River——

79 Q. Just a moment. Is that plant now in active use?

A. In active operation.

Q. And is gas being manufactured there at the present time as economically as it has ever been manufactured there?

Mr. BURR: That is objected to as calling for a conclusion.

The MASTER: The form of the question is objected to. Do you wish to press it in that form?

Mr. GARVER: Well, I will proceed a little further before coming to that exact point. Question withdrawn.

Q. What is its present physical condition?

A. It is in good condition, as good as I know how to make it.

Q. Has it been kept in repair during all the time that you have had supervision of it?

A. Thoroughly, completely.

Q. Have the expenditures been made upon that for that purpose from year to year?

A. There have been.

Q. Can you state generally to what extent that has been done?

A. The amount of repairs?

Q. Yes, just give us a general idea of the extent and character of

the repairs, what has been done to maintain the plant and to keep it in efficient condition.

A. From November 11, 1884, to October 31, 1905, there has been expended in additions on the 14th street plant——

Mr. GANS: We object to that until it has been shown he actually knows of his own knowledge that those expenditures have been made.

Mr. GARVER: I will ask that question.

Q. With reference to these expenditures that have been made, were they made under your personal supervision and with your personal knowledge?

80

A. Absolutely all of them, on my recommendation and on my plans and under my supervision.

Q. And you knew the amounts that have been paid in carrying out your plans and directions?

A. Yes, sir.

Q. Now proceed.

A. On additions to plants——

Mr. PAGE: One minute. Where did you get those figures?

A. These come from the books of the company at No. 4 Irving Place.

By Mr. PAGE:

Q. The books of the company are not kept by you?

A. Not kept by me, but I furnish the figures that go in the books.

By Mr. GARVER:

Q. And by reference to the books, can you refresh your recollection sufficiently to testify accurately to the figures?

A. Yes, sir; the figures in the books come from the engineering department, made up there.

Q. And you have been familiar with those during the period in question?

A. Yes, sir.

Mr. GANS: We press our objection.

The MASTER: State the ground of the objection.

Mr. GANS: It is objected to as incompetent, irrelevant and immaterial, that the witness is not qualified to testify to these figures, on the ground that it is shown that these figures were taken from the books of the company, the ledgers of the company, which are a compilation of figures that have been furnished in past years, and it is on its face impossible that those books and those figures can refresh his recollection so as to enable him to speak from memory.

81

Objection overruled; exception.

Mr. BURR: We object on the ground it is not the best evidence.

The MASTER: I see the force of your objection, but of course all this is, for all we know, liable to be connected with other or more formal proof; I think it is proper to admit it at this stage.

Mr. PAGE: I think we should have the production of more formal proof.

Mr. GARVER: If we went into the production of our books, we would never get through, we have so many of these plants and books.

The MASTER: Any discrepancy in the strict competency of the proof Mr. Garver will have to take the risk of. I will allow it and give an exception.

The WITNESS: During that period there has been expended on the 14th Street plant $1,683,028.17. Of that $693,708.50 was for additions; $9,038 for replacements; $980,281.67 for repairs.

Mr. GANS: We object to this last statement sub-dividing these items under the various accounts, for the reason that it involves a conclusion of the witness, a conclusion both of fact and of law, and upon that ground we move to strike out that testimony and also move to strike it out as not responsive.

Motion denied; exception.

The MASTER: Of course, any ruling of this kind is without prejudice to your right to renew a motion to strike out at any time later before the final submission of the case.

Mr. GANS: I thought we should make the objection now in
82 order to preserve our rights in regard to the matter of the sub-division of expenditures. I presume that the witness is going on now and the same objection will be noted to each.

The MASTER: Yes, the same objection, same ruling and exception to all question- that are identical in purport to that.

Mr. BURR: The same objection and exception on behalf of the city.

Q. Go on to the next plant.

A. 42nd Street, North River, between 41st and 42nd Street-, there has been a total expenditure——

Q. No, what is there there?

A. Oh, a coal gas plant complete, in working order, of a producing capacity of four and one-half million feet per day.

Q. Is that in active and effective operation?

A. In active and effective operation.

Q. What is the present physical condition of the property?

A. In good condition all through.

Q. Has that been kept in constant repair during the period that you have had charge?

A. Yes, sir.

Q. Can you state generally to what extent expenditures have been made upon that plant during the period in question, in repairs and maintenance?

A. There has been expended a total of $987,814.21, sub-divided into, additions, $42,788.01; replacements, $20,535.72; repairs, $924,490.48. Those are the two coal gas plants.

Q. Next?

A. At the foot of 21st street, East River, east of Avenue A, is what is known as the 21st street station of the Consolidated Gas Company; that is a water gas plant, of a capacity of water and oil gas of 27,500,000 feet per day.

Q. What is the present physical condition of *the* that plant?

A. It is in good order. Two years ago it was almost entirely rebuilt in the generating house.

83 Q. What has been done toward keeping that plant in repair?

A. The amount spent there for that period is $3,170,559.78, made up of: additions, $778,019.65; replacements, $643,740.54; repairs, $1,748,799.59.

Q. Next?

A. The next is, the 44th street station, North River, that is a plant that occupies almost the entire block between Eleventh avenue and the river between 44th and 46th streets.

Q. What kind of a plant is that?

A. That is a water gas plant.

Q. It has a capacity of how much?

A. 8,500,000 feet per day. I speak entirely, whenever I give capacities, per day.

Q. What is the present physical condition of that plant?

A. It is in excellent order; the entire generating house and part of the remainder of it was rebuilt at the same time 21st street was, about two years ago.

Q. What has been done, within your knowledge, towards keeping that plant in repair and good condition?

A. There has been expended a total of $1,108,487.35, subdivided into: additions, $147,396.70; replacements, $203,987.50; repairs, $757,103.15.

Q. The next?

A. The next is 99th street, which is also a water gas plant of five and one-half million capacity.

Q. 99th street and what river?

A. 99th street and East River, between 98th and 99th streets and Second avenue and the river.

Q. You said that was a water gas plant?

A. Yes, sir; five and one-half millions capacity, in good order, also extensively rebuilt within the last two or three years. At the same time the other water gas plants were rebuilt this was.

84 Q. What is the present physical condition of that plant?

A. In good condition, doing its work every day, all the time.

Q. What has been expended in the maintenance of that plant and extension?

A. $631,656.66; subdivided into: additions, $124,864.08; replacements, $72,831.95; repairs $433,960.63. That is a manufacturing plant.

Q. And the next—are those all of the manufacturing plants?

A. That is all, in operation.

Q. Then there was a plant at 18th street on the North River?

A. There was.

Q. What kind of a plant was that?

A. That was a coal gas plant and was in operation up to August 1, 1903, I think, but I am not sure whether it was 1903 or 1902; I think it was 1903.

Q. What was the capacity of that plant?

A. That was three and one-half millions.

Q. Was that plant operated up to the time that the city took possession for the purpose of improving that property?

A. Up to the time and after the city took possession they turned us out.

Q. What was the physical condition of the property at that time?

A. In good order, kept in good repair.

Q. Had considerable amounts been expended in the maintenance of that plant?

A. Up to the time there was $1,292,323.33 expended on it, subdivided into: additions, $424,173.09; replacements, $1,500; repairs, $866,650.24.

Q. Those condemnation proceedings instituted by the city to acquire that property are still pending, are they not?

A. Yes, sir.

Q. That completes the plants. What holders do the Consolidated Gas Company own?

A. All through?

Q. Yes, go right through.

A. Shall I read the sizes of each group of holders or just——

85 Q. Just state in any order that is convenient where the holders are located and their sizes?

A. At the 14th Street station there is one holder of 3,200,000 feet capacity; there are six holders of 350,000 feet each, and two holders of 250,000 feet each, making nine holders of an aggregate capacity of $5,800,000 feet; at the 18th Street station.

Mr. GARVER: Perhaps it would be better to take them in the same way you gave the others—but never mind, go on.

Mr. BURR: You asked for the sizes.

Mr. GARVER: Yes, he gave it.

The WITNESS: I cannot give you offhand the diameter; I can to-morrow. The cubical capacity is really the measure of size.

Q. That is always the way engineers refer to the size?

A. Yes, sir; simply the capacity. Eighteenth Street has two holders of 205,000 capacity each, and four of 250,000 capacity each; six holders of an aggregate capacity of 1,410,000.

By Mr. PAGE:

Q. Those are still in use?

A. Those are still in use and are not involved in the condemnation proceedings. Twenty-first Street has four holders—shall I describe the location of the place again?

By Mr. GARVER:

Q. If you can, as well as you can.

A. Twenty-first Street, East River, between First Avenue and Avenue A, between 20th and 22nd Streets, there are four holders of 400,000 capacity each, and one holder of one and one-half million capacity; five holders of 3,100,000 feet capacity.

86 42nd Street, North River, on the block between 11th Avenue and the river, and between 40th and 41st Streets, are four holders of 250,000 each, making 1,000,000.

44th Street, North River, on the two blocks between 44th and 46th Streets, and between 11th Avenue and the river, are four holders of 375,000 each, and one of 2,000,000, an aggregate of 3,500,000 for the five holders.

At 63rd Street, east on the block between 62nd and 63rd Streets, and between First and Second Avenue-, is one holder of 3,000,000 capacity.

At 65th Street, North River, on the block between Amsterdam and West End Avenue, are two holders of 4,000,000 each, four holders of 325,000 each, and two holders of 300,000 each, making an aggregate capacity for the eight holders of 9,900,000.

At 99th Street, on the block between 98th and 99th Street,- between Second and First Avenues, are two of 600,000 and one of 300,000, a total for the three holders of 1,500,000.

At 111th Street, east, between Second and First Avenues, and between 110th and 111th Streets, are two 5,000,000 holders.

Q. Those are the largest holders on Manhattan Island, aren't they?

A. Those are the largest on Manhattan Island; there are others of the same size.

By Mr. MATHEWSON:

Q. It makes a total of 10,000,000 for the two holders?

A. A total of 10,000,000 for the two holders. At Inwood we have one holder of 60,000 capacity.

By Mr. GARVER:

Q. Does it cost more relatively to construct a small holder than a large holder?

A. Very much more.

Q. Why is that?

87 A. Because of more—well, I don't know as I could put it in language exactly—it costs more because of the extra amount of work per unit of capacity when finished; there has to be a certain amount of labor performed, and on a small holder the labor is more per unit than it is on the large ones, that is, on a large holder; also the same in the tank built to contain the holder; you can build a large tank per unit much cheaper than you can build a small tank.

Mr. PAGE: He has not given all the holders.

A. (Continuing:) The 132*th* Street holder is complete and is ready for use; that is, I don't know but it is already in use. That I have here is under construction.

Q. Are there any other holders?

A. One at 132d Street and North River, on the block between 132d and 133d.

Q. That is the large holder there by the new viaduct?

A. By the viaduct that we heard about in the papers awhile ago; that is one of holder of 5,000,000 capacity.

Q. That has how recently been completed?

A. Within ten days. I gave orders to have gas put in it yesterday; whether it was or not I don't know.

Q. What was the total cost of construction of that holder?

Mr. GANS: I want to note an objection to that as not the best evidence as to cost.

Mr. GARVER: The Supreme Court has said that is pretty good evidence.

Mr. GANS: He is asking what the total cost of construction of the holder was, and there is no proof that he has checked all the bills and knows all about it.

The MASTER: I will take it.

88 Mr. GANS: The objection, of course, is that he is not competent to testify to that fact, that he has not been proved to be competent.

Objection overruled. Exception taken by Mr. Gans.

A. About $460,000; the exact amount I cannot give you. I made the contract for the holder.

Q. You have had the supervision of its construction?

A. I have had supervision of it entirely during its erection.

Q. And you have been familiar with the amounts expended?

A. Yes.

Q. Have you had charge of the construction of the new works at Astoria?

A. Yes.

Q. What is the present condition of those works?

Mr. GANS: I object to that as incompetent, irrelevant and immaterial.

Mr. BURR: The same objection.

The MASTER: I will allow it.

Exceptions taken by Mr. Burr and Mr. Gans.

Mr. GANS: Of course you are referring to the works of the Astoria Power Company?

Mr. GARVER: The works that nominally stand in the name of the Astoria Light, Heat & Power Company.

Q. (Continuing:) I refer to the works on the lands shown on Complainant's Exhibit 63. What is the condition of those works?

A. They are in process of erection and will be completed to a point to produce gas probably in October of this year.

Q. State a little more in detail what you mean by saying that they are in process; how long has that process been going on, and what is the extent of the improvement that has been made?

A. About three years from the first inception. There are two retort houses built, almost entirely completed. One is an in-

89 stallation of inclined retorts, the other is an installation of horizontal retorts; they are designed for a capacity to produce 10,000,000 feet each a day.

Q. That is a total of 20,000,000?

A. A total of 20,000,000 for the two houses. The purifying houses are completed, both of them. I might say by way of ex-

planation, which will save a little time afterwards, that each house is connected as an independant gas works; that is, there are two retort houses and two purifying houses—duplicates of everything right through, so when I speak of the two houses I mean one unit. It is all one plant.

Q. It is a duplicate manufacturing plant?
A. Yes.

By Mr. PAGE:

Q. It is all coal gas?
A. Yes.

By Mr. MATTHEWSON:

Q. That is what you call the first unit?
A. I call it one unit, but it is divided into two parts, and each part is a complete gas works.
Q. But your first unit has a capacity of 20,000,000 feet per day?
A. Yes; the two have a capacity of 20,000,000 feet a day, two houses, each capable of producing 10,000,000 feet each day, or an aggregate of 20,000,000 from one unit. The purifying houses are completed with purifying boxes and connections, all ready for use. The boiler plant is completed and was in use last winter, furnishing steam for the various operations around there. The tar extractors, condensers and ammonia washers—I should say they are about 85 per cent. complete, leaving but very little to be done. The meter house is practically complete. The 15,000,000 feet holder that is being erected in conjunction with this plant has just about got started on the iron work. The tank is completed, but the holder is in process of erection.

90 By Mr. GARVER:

Q. How about the exhauster house?
A. The exhauster house is complete.
Q. I think it would be rather desirable if you could state briefly what constitutes a gas manufacturing plant?
A. In connection with the process of manufacturing gas, a coal gas plant, in the manufacture of coal gas, the first operation is to get the coal into the retort house. It is customary in New York that coal comes by water almost entirely. We have no railroad connections on Manhattan Island, and over there none as yet. It is taken out of the barges and put into storage or carried direct to the retort house as the case may warrant by means of conveyors and elevators and all sorts of different machinery for the purpose. In the retort house it is placed in the retorts. These retorts are built in what is technically called benches, or ovens, containing in this case, of the inclined retorts, nine retorts in one oven or in one bench, and in the case of the horizontal house eight retorts in one bench. Those are heated up to the proper heat coal is charged into the retort and the gas is driven off by the heat; the coal is distilled, you might say. The gas as driven off passes from the retort through the standpipes into what is called a hydraulic main. The hydraulic main runs along the top of the benches and is a collector for the gas as it comes

from the retorts. The mouth of the standpipe is sealed in liquid in the hydraulic main so as to prevent the gas from backing out when the door of the retort is opened.

The pipe stands vertically, turns over and comes down into the hydraulic main and is there sealed in this liquid, so that when the retort mouth is opened the liquid holds the gas from backing
91 out. Otherwise you could not open the door to put in fresh coal. After the gas is worked off the retort mouth is opened and the coke is discharged and a fresh charge put in. That is a continuous operation night and day for twenty-four hours in the day and 365 days in the year, as is the case with all gas works. From there the gas goes across into the condensers, tar extractors, ammonia scrubbers, each of which have their duty to perform. The condensers simply cool the gas, and in process of cooling the tar and condensible vapors drop out. The ammonia scrubbers, where the gas is brought into contact with the water, which has an affinity for ammonia, effect the office of extracting the ammonia gas from the gas in its passage. In the case of Astoria the gas will then pass—this is a new thing and has never been done before in this country, and we cannot tell what it will be—but the gas will pass into cyanogen washers. That is for the purpose of extracting the cyanides from the gas, with a possible deposit of prussiate of potash and prussiate of soda. That is used in the ore refining business, the cyanide process. This, as I said before, has never been accomplished in this country. There are no works in this country using it, and we are simply trying it to see what it will do. It is used in England and Germany and various other places. From there the gas goes into the purifiers, large boxes—in the case of Astoria, forty feet square by seven feet deep—filled with a mixture of oxide of iron, shavings and a little lime. The gas passes through this mixture and there leaves its sulphur, which is always present in gas, and which passes along with it up to that point. These boxes are emptied and filled periodically, as the material in the box becomes saturated with sulphur and inactive. When that happens it has to be taken out and renewed.

From there the gas goes to the station meters, where it is
92 registered in quantity, and then to the holder, ready for distribution.

Q. Did you mention the exhausters?

A. I seem to have some reason for not saying anything about exhausters to-day. I do not know why. The gas is drawn from the retort house and through the condensers and washers by means of exhausters. These are simply gas pumps that draw the gas along the same as a water pump would draw water, draw it along from the retort house and through various parts of the apparatus, and force it through the purifiers and into the holders. That I should have stated.

Q. Then, from the holder the gas is distributed?

A. The gas goes from the holder to the street mains.

Q. Are these holders, at the various points as you have described them, connected by the street mains?

A. Every holder is connected with a street main, yes.

Q. I mean, are the various holders connected with each other through the street mains?

A. In New York we have a system of independent piping, connecting each station and each works together, and at each station and at each works are provided pumping apparatus, engines and exhausters and pumps to send the gas rapidly and in large volumes from one station to another, to be used in case of emergency or shortage in any particular district.

Q. If you should have an accident that prevented your getting a supply of gas from one station you can draw it from some other station through these pipes?

A. Yes, we have done it many times.

Q. What connection will there be between these works at Astoria, to which you have referred, and Manhattan Island when these works are completed?

Mr. GANS: Objected to as incompetent, irrelevant, immaterial and hypothetical.

93 Mr. BURR: The same objection.

The MASTER: I will allow it.

Exception taken by Mr. Burr and Mr. Gans.

A. We have laid already in the ground now a gas main, sixty inches in diameter, from the works in Astoria through Van Alst Avenue, and through two or three other streets that I do not exactly remember now, in Long Island City, to the works in Ravenswood.

Q. That is a distance of about three miles?

A. A distance of three miles. That main is laid and in place.

Q. That is a through main?

A. A through main.

Q. Can it there be connected with the tunnel under the East River?

A. Yes; right direct, right through the works. That is the purpose.

By the MASTER:

Q. What is the size of that main?

A. 60 inches; five feet in diameter.

By Mr. GARVER:

Q. Is that an unusually large main?

A. That is the largest gas main I know of; I guess it is the largest in the world; it is the largest in this country, anyway.

Q. That fifteen-million-foot holder up there is the largest in the world, at Astoria?

A. It is the largest in the world. There are two tanks being built, although only one holder has been contracted for. Another will be put in.

Q. Of the same capacity?

A. Of the same capacity.

Q. You spoke of these as the first unit. As it is completed your additional units will be added?

Mr. GANS: I object to that as incompetent, irrelevant, immaterial and hypothetical.

94 The MASTER: I will allow it.

Exception taken by Mr. Gans.

A. I laid out myself the entire plans for the property, and it involved the construction, when it was completed, of works capable of producing, or a series of works capable of producing 240,000,000 feet a day.

By Mr. MATTHEWSON:

Q. How many units would that make?

—. Twelve units of the size I have described.

By Mr. GARVER:

Q. What is the present total capacity of the works on Manhattan Island to which you have referred?

A. 51,000,000 feet.

Q. Does that exclude the 18th street plant?

A. Yes.

Q. Is that sufficient to supply the present demand?

A. No.

Q. To what extent is it deficient, if you know?

A. I cannot tell that exactly. There is a deficiency, but I would have to refer to our records for that. I could not give that offhand.

Mr. PAGE: It is ten billion feet that you manufacture and three billion feet that you buy, per annum?

The WITNESS: Yes.

Q. That is approximately correct, approximately you buy three billion feet a year?

A. Yes, approximately that is correct.

By Mr. MATTHEWSON:

Q. That is the production of the Manhatfan plants below

95 sales of the Consolidated Gas Company, a deficiency to that extent?

A. Yes.

By Mr. GARVER:

Q. You spoke of a total capacity of twenty million cubic feet for the first unit of the new Astoria plant. What would that mean for the annual capacity of that plant?

A. Twenty million multiplied by 200—four billion.

Q. Why do you not multiply the twenty by 365?

A. Because we cannot produce our daily maximum capacity every day in the year. We have to have capacity of works sufficient to supply gas in the winter at the time of maximum consumption. In the summer there is 60 per cent. less gas used than in the winter, but still we have to have the apparatus to provide the maximum. Therefore, taking the maximum daily average and multiplying that by 200 days, it gives about an average for the entire year.

Q. And that you have to provide for?
A. That we have to provide for.

Mr. GANS: If you had winter all the year round, with the same consumption of gas, you could go on manufacturing at your maximum all the year round?

A. We would have all the business that we wanted.

By Mr. GARVER:

Q. But you would have to stop for repairs?
A. Yes, or the plant would wear out.
Q. Don't you shut down some for repairs?
A. We make our repairs in the summer, and we endeavor to get everything ready for the winter's business.
93 Q. Is every plant shut down every year for repairs?
A. No, we do not shut them down; every plant is slacked off, as we term it.
Q. So that repairs may be made?
A. Yes, if we are making five million feet of gas in winter per plant, and during the summer we only have three million, that leaves us two millions to enable us to make repairs and put the plant in order for the next year's business.
Q. You shut them down part by part and continue the manufacture of gas to the extent that is required, without interfering with the repairs?
A. Without interfering with the repairs.
Q. During the course of the season you can repair the entire plant in that way?
A. If it is required, we make such repairs as may be required; we repair the entire plant if it requires it, or such portions as do require it.
Q. And your capacity has to be sufficient for some reserve, does it not?
A. Oh, yes, we have to have reserve capacity.
Q. In other words, there is an unequal demand on the part of the consumer, and you have to be ready at all times to supply the maximum?
A. Yes, I have seen it within a year, a variation of six million feet between one day and another.
Q. And you have to have capacity sufficient to supply that?
A. Yes, to make up these irregularities.
Q. Take an afternoon like this, with a heavy thunderstorm; the lights of this office have been turned on; would those conditions require an unusual supply of gas?
A. We would send out a couple of million more feet of gas this afternoon than we would if it remained pleasant. That is why people complain of their gas bills, when we have an unusually dark month; they say "they have not been burning any more gas,
97 but the gas bills are just as high." They do not know it, but they use it.
Q. What you have stated as to the Astoria plant would be true of

all the plants on Manhattan? That is, the maximum capacity would not apply to every day in the year, but only to about two hundred?

A. Yes, that is always the rule; multiply the daily maximum capacity by two hundred and you get the yearly production.

By Mr. MATTHEWSON:

Q. What you might call the yearly capacity?

A. Yes, what we might call the yearly capacity.

By Mr. GARVER:

Q. If you were confined to the winter season alone, the case would be very different from that?

A. Then we would have to double our works, because we could not run them all the time.

Q. At that 18th Street plant there were five of the holders which have been taken by the city and which no longer stand. What was their capacity?

A. The four small ones—the capacity was 250,000 feet each, and the large holder 3,200,000.

Q. That would make about 4,200,000?

A. Whether it was 3,200,000, or exactly 3,000,000 I am not exactly clear now.

By Mr. PAGE:

Q. That is in addition to those you have given?

A. That is in addition to those I have given; I think it was 4,000,000. I think it was 3,000,000 and 1,000,000.

By Mr. MATTHEWSON:

Q. Those have all been taken by the city?

A. Those are taken away entirely, removed, gone.

98 Q. The proceeding in regard to their condemnation is also pending?

A. Yes, I understand so. Nothing has been settled yet, I understand.

By Mr. GARVER:

Q. Are all these holders, except the five taken by the city, in actual use at the present time?

A. Yes.

Q. What is their physical condition?

A. They are in good condition.

Q. What do you mean by that?

A. Well, they are in good physical working condition; there is nothing wrong with them, and they require no special repairs, care or attention.

Q. Do these holders deteriorate rapidly?

A. No, sir.

Q. Have you ever known a holder to wear out?

A. I do not think I ever did. I have taken out a good many

holders because they were too small, but never one because it was worn out.

Q. Does not the gas tend to act as a preservative?

A. The gas acts as a preservative on the interior, and the paint that we apply on the outside takes care of the exterior.

Q. Chapter 125 of the Laws of 1906 provides that the pressure of gas in the City of New York shall not be less than one inch nor more than two and a half inches. What does that mean?

Mr. GANS: Is not that rather a striking question? I object to that as asking the witness to construe the law.

The MASTER: Do you understand that he is asking him to construe the law? I understood that he was asking him what that meant.

Mr. GARVER: I want to know what that means, as an engineering expert.

Mr. GANS: What the pressure is?

Mr. GARVER: Yes.

99 Mr. GANS: Then I will withdraw the objection.

Mr. GARVER: I will quote it exactly as it is: "The pressure of illuminating gas in any service main in the city of New York, at any distance from the place of manufacture, shall not be less than one inch, nor more than two and one-half inches." What do you undertsand that the company is required to do in order to comply with that provision?

A. To supply gas to its consumers and to the city of New York over the whole surface of Manhattan Island with a variation, an allowable variation, of only one and a half inches of water. That is, a pressure that will sustain a column of water one inch and a half out of level. (Illustrates by diagram.)

Q. Is it, in your judgment as an expert, physically possible for the company to comply with this requirement of the statute?

A. It is absolutely impossible.

Q. Why do you say that?

A. Because of the physical conditions and the action of the gas in the mains over which the company has no control, the variations of pressure caused by the consumers, opening up and shutting off gas; all this we cannot control.

Q. Do atmospheric conditions affect it?

A. Atmospheric conditions affect it, they are apt to interfere with it, and I say further that we cannot control it because I have tried faithfully for over a year to do it and have not succeeded.

Q. Did you mention variations in elevation?

A. Variations in elevation, of course they have their effect.

Q. In what way?

A. The gas pressure increases in proportion to the altitude.

100 That is, there is more pressure at the top of a gas main at a high elevation than there is at the bottom; more apparent pressure, not more actual pressure but more apparent pressure; pressure as we use it.

Q. That is according to the gauge registers?

A. According to the gauge registers.

Q. Are these such conditions in altitude here in New York?
A. Yes, sir.
Q. Will you mention some of them?
A. All the way from one hundred and fifty feet to in the neighborhood of two hundred and fifty feet I should think.
Q. What difference would there be between tide level?
A. At 250 feet it would be about an inch and a half, our limit, taking the specific gravity of the gas that we make.
Q. What effect if any would a thunder storm, such as we have had this afternoon have upon the pressure?
A. The thunder storm, except as a cause, would not have any effect. The city getting dark, by heavy clouds going over it, would of course make it necessary for everybody to light up their gas and use it, and the pressure would immediately reduce, except it was kept up by attention at the works.
Q. Does not barometric pressure affect it?
A. Yes, barometric pressure affects it also, but that is a small item. I have put in during the past year seven electrical pressure devices, with the endeavor to, as far as possible, regulate the pressure within the limit of the law.
Q. And has that been successful?
A. Not yet, no, sir.
Q. At the intersections of the streets, how are the mains arranged for the purpose of equalizing pressure?
A. The mains are connected together at the cross-streets by running through by what is technically termed a cross into the
101 main. That is, with four openings, and the gas mains are simply common; they are all commonly connected.
Q. Does the effect of that tend to equalize the pressure?
A. Yes, only for that we could not supply the gas.
Q. You have had charge of the pressure of the gas, have you not?
A. Yes.
Q. Ever since you became chief engineer?
A. Yes, ever since I became chief engineer.
Q. And have you maintained any greater pressure than has been necessary to supply the demands of consumers?
A. No, sir.
Q. Has not the complaint been the other way, that the pressure has not been sufficiently great to supply the demands?

Mr. GANS: I object to that as hearsay.
Mr. GARVER: That is part of the business of the company.
The MASTER: In so far as it calls for anything that he knows about he can answer. I do not know what the materiality of it is, but I allow him to answer.
Mr. GANS: I object to it as hearsay and incompetent.
Objection overruled; exception taken by Mr. Gans.

A. I have known of complaints, hundreds of complaints, from consumers that they did not get gas enough, and we always try to supply them the best we can.
Q. Take an afternoon like this, where the office buildings in the

lower part of the city are lighted up; does that have any effect upon the pressure of the gas in the other parts of the city?

A. It draws it away from the lower districts, and that was the reason for my adopting these electrical signalling machines,
102 to supply the gas as fast as it was drawn down, and to maintain a steady, uniform pressure.

Q. Suppose you should never exceed the pressure of two and a half inches; what would be the effect of that?

A. I would not like to say what the effect would be. There would be an absolute loss of business; we would get out of business.

Q. I mean, would there be sufficient pressure in that case to supply the consumer?

A. No, sir; we could not supply the consumer; absolutely no.

Q. Would there be any danger to life from that cause?

A. Yes, if we should reduce the pressure to that point, at no point in the mains to more than two and a half inches, there would be a great many other points where there would be absolutely no pressure at all, and, the burners being opened, the supply would come on again, and it would probably result in the death of a great many people.

Q. How is the pressure affected by the manner in which the gas is consumed? For instance, through gas ranges and Welsbach burners, and gas logs, &c.?

A. Welsbach burners and ranges require a higher pressure than the ordinary old-fashioned flat flame burners, open burners.

Q. The services in many cases are still these small services?

A. In many cases; we have renewed a great many. The chief difficulty lies in the house piping. In many of the houses which were built a great many years ago, and in fact some not so many years ago, the pipes were put in of small size, and now those houses are supplied with gas ranges and gas stoves and all manner of gas appliances, and the pipes in the house are too small to deliver the gas to them. Then they call on us to increase the pressure and give them the gas.

Q. And you have changed the services largely?

A. Yes, we have changed a great many, thousands, under our control.

103 Q. Do you know of any requirement anywhere of a maximum pressure?

A. I have never heard of one. I have made inquiry and I have traveled all over this country and all over Europe, and I never heard of a case where a maximum gas pressure was made.

Mr. GANS: I move to strike that out, if the Master please. I did not understand that he was asking for laws of other countries.

Mr. GARVER: I was not asking for laws of other countries, but the practice in connection with the requirements of the business.

The MASTER: I do not see how it is material, but I will allow it to stand. He asked him if he had ever heard of a maximum pressure, and he says he never did.

Mr. GANS: Then may I have my objection noted to the question itself?

The MASTER: Yes, and the ruling.
Exception taken by Mr. Gans.

Q. In connection with the business of manufacturing and distributing gas, it has been generally recognized that it is wise to have a minimum pressure, has it not?

Mr. GANS: I object to that.
Objection overruled. Exception taken by Mr. Gans.

A. Yes, there is no objection to that, and no reason why there should not be. There are a number of places where they have those regulations. In London, for instance, they have a minimum.

I might say by way of further explanation in regard to the one inch and two and a half inch pressure (quoting): "When it is considered that gas must be delivered to the consumer, under the
104 existing law, between a minimum of one inch and a maximum of two and a half inches water pressure, over the entire city, and that one inch water pressure is but 36 one thousandths of a pound, where the maximum, or two and a half inches, is but 91 one thousandths of a pound, the impossibility of regulating the supply of gas under any atmosphere, or pressure, as stated is at once manifest."

Q. You heard Mr. Francklyn testify to the fact that some of this real estate of the Consolidated Gas Company was used for tenant purposes?

A. Yes, sir.

Q. Do you know whether any of that is used by any of the employees of the Gas Company?

Mr. GANS: I object to that as incompetent, irrelevant and immaterial.
Objection overruled; exception taken by Mr. Gans.

A. I know that it is. I know that our employees in many cases live in the company's houses, adjacent to the works.

Q. Is that in connection with the operation of the works?

A. They are employed in connection with the operation of the works, yes.

Q. Is there any reason why they should live adjacent to the works? Is it desirable to have them?

A. We like to have them, yes, because we know where to find them in case of accident, or if they are wanted.

Q. Mr. Francklyn referred to some property between 60th and 61st Streets that was vacant, although I think he said it was proposed to use that property for holders. Do you recall that property?

A. Yes, I know it.

Q. Do you know whether the property is held for that purpose?

Mr. BURR: I object to that because it is not competent at
105 all. The question is what property is now being used in the manufacture and distribution of gas, and not what may be contemplated for use in the future, and upon the present use now the valuation and the cost is to be based. They might have in their mind's eye ten years from now, with the growth of a particular

district, that they would use that for a holder, or for some other branch of the business. That is not the question before your Honor to-day. The question is what property is now used, and the value of the property, and how far does the value of that property in use go to produce the cost of manufacture and distribution of gas in New York.

Mr. GARVER: There is no law requiring a gas company to live from hand to mouth. It does not have to wait until it needs a piece of property for a holder in order to acquire it in connection with its business.

Mr. GANS: We join in that objection.

The MASTER: Suppose they had bought a lot, and it is vacant to-day, and it should appear here on this hearing that they had filed a plan before the building department for that purpose, or some other purpose connected with their business; ought that not to be taken into account?

Mr. BURR: Well, I suppose it would.

The MASTER: How can I tell at this stage? I overrule the objection.

Exception taken by Mr. Gans and Mr. Burr.

Mr. GARVER: The company not only may, but it is bound to make a reasonable provision. The building of a holder is not a matter of a day, but it is a matter of months or years.

A. That property has been held for that purpose.

106 Q. That property is near the terminus of the present tunnel, is it not?

A. Yes, sir.

Q. And it is conveniently located for the purpose of holders?

A. Yes, we have laid mains, now, from the terminus of the tunnel to the holders. They are being built there at present for the purpose of supplying gas.

By Mr. GANS:

Q. The Astoria tunnel?

A. No, at 71st Street where the tunnel crosses under Blackwells Island, and comes in between 70th and 71st Street.

By Mr. GARVER:

Q. About how long does it take to construct a gas holder say of the capacity of 3,000,000 cubic feet?

A. Without undue delay from strikes or difficulties, or being unable to get material, it would take ordinarily about one year.

Q. But taking the ordinary chances, it might require a longer time?

A. Taking the usual chances of strikes and difficulties with material it will take longer than that.

Q. If it was a masonry tank, how long would it require?

A. If it was a masonry tank it would probably require a year and a half.

Q. You referred to the holder at 132d and 133d Streets, which

has just been finished; there is some vacant land there to which Mr. Francklyn referred?

A. There is room for two more holders.

Q. Is that being retained for the same purpose, that land?

Mr. GANS: I make the same objection.

The same ruling and exception.

A. Yes, the property has been bought for that purpose
107 and held for that purpose ever since we have had it.

Q. Mr. Francklyn referred to the triangular piece of land on the corner of 60th Street, which I think he said was vacant. Do you recall that? Is that held for any particular purpose, do you know?

A. No, sir.

Q. How about the 65th Street property on the west side, near the large holders?

A. That is not used.

Q. Did you not say that that was used for an exhauster house?

A. Oh, on the south side of 65th Street, yes—that was about a year and a half ago, and I prepared drawings and plans for a valve, boiler and exhauster house, to be located on these premises, but we did not get to work at it this year.

Q. You intended to but did not?

A. We intended to and did not; the plans are all ready.

Q. You intended to have them constructed there on that property?

A. Yes.

By Mr. BURR:

Q. Have the plans been filed?

A. I cannot tell now whether plans have been filed or not. I hesitated; I think they have, but I am not sure. My assistant files those things sometimes when I am away, and sometimes I do not know.

Q. Reference has also been made to the southwest corner of 116th Street and Lexington Avenue. Mr. Francklyn stated that that was intended for an office.

Mr. GANS: That we object to, of course.

Objection overruled; exception taken by Mr. Gans.

A. That was bought for the purposes of an office, but the office has never been erected yet. I do not know what the chances are for that.

108 By Mr. BURR:

Q. That is a vacant lot, is it not?

A. That is a vacant lot, I think it is. At one time we used it for the storage of pipe, but whether that has been taken out or not, I do not know; it was used for that purpose at one time.

Q. In your opinion, as to all this land which is marked in blue on Plaintiff's Exhibit 48, it is either in use or likely to be required for the use of the gas company in connection with its business in the immediate future?

Mr. GANS: Objected to as immaterial, irrelevant and hypothetical, and as calling for an expert opinion on a question on which an expert opinion may not be given.

Mr. BURR: We join in that objection; and further than that, not warranted by any facts which have been presented up to the present time. Further, that the witness is incompetent. He is identified with the company and interested.

The MASTER: I think there may be some force in some few of these objections, but I will allow it and give you an exception. Of course his opinion as to whether it is in use is not exactly what you mean. I understood the question to be as to whether in his opinion this land not in use was likely to be required in the immediate future?

Mr. GARVER: Yes; I will put it that way.

Mr. GANS: That was the part to which we objected.

The MASTER: Yes, that was the part to which you objected, but I assume that having been in the gas business for thirty or forty years, he may testify as an expert.

Exception taken by Mr. Gans.

109 & 110 A. Much of it will be used, dependent to some extent upon the Astoria project.

The MASTER: That was not the question, it was whether it would be reasonably necessary, as I understand it.

Mr. GARVER: Whether as a matter of business caution you think it is reasonably necessary that the company should retain this property which is not now actually used in connection with the gas manufacturing business, for the business of the company in the immediate future?

A. (Continuing:) Under present conditions, yes, sir.

At 4.20 o'clock P. M., adjourned to to-morrow, Wednesday, July 18th, 1906, at 11 o'clock A. M.

Last Exhibits:

Complainant's 69.
State's "A."

111 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, *July* 18, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Matthewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr.

112 WILLIAM H. BRADLEY—Further examination continued.

By Mr. MATTHEWSON:

Q. You were asked yesterday whether plans had been filed for the valve house which the company was to erect on the 65th Street plot, west of Amsterdam Avenue. Are you able to say this morning whether they have been filed?

Mr. PAGE: Objected to as immaterial and irrelevant to the issues in this case; as to what plant is actually in use an inquiry I suppose may be directed to ascertain the value of the plant, but not what future plants may be built or constructed by the company.

Objection overruled; exception.

A. Yes, sir; plans were filed with the Building Department for the building.

Q. How long ago?

A. Dated November 1, 1905, and received the approval of the Building Department on November 21, 1905.

Q. You also yesterday in illustration of the difference in the demands of consumers referred to the fact that being a dark day yesterday more gas would be required than on a light day. Do you know this morning how much more gas was sent out by the Consolidated yesterday than was sent out the day before?

Mr. BURR: Objected to; that has no bearing whatever upon this situation, it seems to me, while it may be very interesting as an incident in the operation of a gas plant.

Mr. MATTHEWSON: It shows the necessity for reserve.

113 The MASTER: I assume it will be further connected; I will take it.

Exception.

A. We sent out yesterday as compared with the day previous five million feet in excess.

Q. You stated that the construction at Astoria had been under your supervision from the outset. Can you say how much has been expended to June 30, 1906, at Astoria, in connection with the plant there?

Mr. BURR: Objected to.

Mr. PAGE: This will be taken subject to the same objection that we made as to all this Astoria testimony.

Objection overruled; exception.

Mr. GANS: Further objected to on the ground that this is not the proper method of proving these expenditures, unless it is shown the witness knows; there is no evidence he knows what expenditures have been made, there is no evidence he knows the details, even though he may have some hearsay evidence as to the gross sum that has been expended.

The MASTER: I understood him to say yesterday that all these expenditures had been made with his personal knowledge, and were reported by him to the bookkeeping department. I do not suppose that that alone would make it competent evidence if objected to, at the same time it is a link in the chain, I think, and I will allow it.

Mr. BURR: This is all taken subject to a motion to strike out if not plainly apparent that this witness has knowledge of the facts that he is testifying to.

The MASTER: I assume they intend sooner or later to make
114 proof that will satisfy technical objections as to that, and I will let them put this in preliminary.

Exception.

A. The total investment to date, that is to June 30th, is $8,522,490.01, deducting from that the land——

Q. Just state how much of that represents land?

Mr. GANS: All subject to the same objection, I assume.

The MASTER: Certainly.

A. $1,132,558.28.

Q. Does that include amounts due on outstanding contracts, uncompleted?

A. It does.

Q. How much is that?

A. There are amounts due on outstanding contract uncompleted and in process of completion of $1,460,974.97.

Q. With the exception of the last mentioned amount the entire total which you specify has been expended in cash, has it?

A. Yes, sir.

Q. Up to June 30th, 1906?

A. Yes, sir.

Q. Were these expenditures made through your department in the construction of the plant?

A. They were.

Q. The contracts made through your department?

A. The plans were drawn in my department and the contracts

made and specifications made in my department and the accounts kept.

Q. So you are personally familiar with these matters yourself?

A. Yes, sir.

Q. Are not all the payments certified to by your department before payment?

A. By either me or one of my assistants under my direction.

Q. Will this total of $8,522,490.01 complete the first unit at Astoria, or will further construction be required in addition to
115 that?

A. No, sir, further construction will be required.

By Mr. PAGE:

Q. Besides these outstanding contracts?

A. Besides these outstanding contracts.

By Mr. MATTHEWSON:

Q. What is the estimate excluding land and tunnel, of the cost of this first unit at Astoria, when fully completed?

A. (No answer.)

Q. If you are not able to say at the moment I will not press it; do not stop to look it up.

Question withdrawn.

Q. Have you in mind your estimate of the total cost of the first unit, including land and tunnel, or would you wish to refresh your recollection on that?

A. I would have to separate in my mind some of the items. Including land and tunnel?

Q. Yes.

A. Approximately, $13,000,000.

Mr. MATTHEWSON: That is all.

Cross-examination by Mr. PAGE:

Q. You state that the accounts, books of account relating to the construction of the Astoria plant are in your possession?

A. No, sir.

Q. Were the payments made by you?

A. The actual physical payments were not made by me; they were made on my certificate, by check from the Treasurer.

Q. Have you the contracts in your possession?

A. Yes, I have all the contracts, I think, that have been made already.

Q. Just state the method of business between you and the accounting department in respect to these matters.

116 A. Well, I will have to start a little further back than that. Drawings are made, the portion of the plant under consideration is designed, examined and approved, then the specification is drawn, then proposals are asked for—bids, from various contractors who are operating in that line.

Q. This is all done by you, I understand?

A. This is all done in my office, yes, sir. The bids are received, tabulated—examined, considered and tabulated and then recommendation is made by me to the executive committee that certain contracts, certain work be awarded to certain people—contractors.

If that is passed, and it usually is, the contractors are notified to go on with the work. As they go on with the work, the contract provides for the payment made as the work progresses proportionately to the amount of work done. When the inspecting engineers report that a certain percentage of the work has been completed, or when in my judgment I am satisfied that a certain proportion of the work has been done, a certificate is made out for the amount of money due the contractors on that work.

Q. Do you sign the certificates yourself?

A. Sometimes; sometimes my assistant does; if I am present, I sign it. All of these accounts—I am a little ahead of my story because all of these accounts are turned over previous to this last act to the accounting department, and a record made there of all the transactions in connection with the work. A copy of the contract is also filed in the accounting department, and when the certificates are made out they are sent downstairs to the accounting department, compared with the contract, with the specifications to see if the contract has been complied with, and checks drawn for the amount.

Q. These certificates that are issued by you are copies of
117 them kept by you?

A. Oh, yes, we have copies.

Q. And the original certificate is filed in the accounting department?

A. In the accounting department.

Q. And I suppose is kept there?

A. Kept there. I assume it is kept there.

Q. When you refer to the accounting department, of what company is it?

A. Consolidated Gas Company, in my case.

Q. I mean where you have used the term?

A. At 4 Irving Place.

Q. And the accounts that are kept as to the expenditures of the Astoria plant are kept in the accounting department of the Consolidated Gas Company?

A. They are.

Q. Some of them have not been built as yet?

A. Not yet.

Q. Can you give us the amount of your estimated cost of the tunnel?

A. The tunnel itself?

Q. Whatever it was that you stated, including land and tunnel, would cost approximately $13,000,000; whatever you meant by that tunnel account, what you had in your mind?

A. $2,650,000.

Q. I suppose that is a tunnel of sufficient size to carry the product of twelve units?

A. Very likely; I would not like to say absolutely that I know that to be the fact. I have not gone into that subject yet fully.

Q. You prepared the original plans and estimates with an idea of having twelve units, did you not?

A. Oh, yes, twelve units.

Q. So that whether it would carry the twelve units would depend upon whether you had made the proper calculation at first, would it not?

A. Yes.

Q. So that your estimate was based upon a tunnel of that
118 size?

A. My estimate was based upon a tunnel of that size. I may say that I designed the tunnel for the purpose of putting into it five sixty-inch gas pipes or mains. I had not considered that to be of especial interest right at this time, because it will be a great many years, or a number of years, before the tunnel will be required to its full capacity, and what changes might take place in the meantime I cannot foresee.

Q. How long is that tunnel?

A. It is six thousand and thirty odd feet; I cannot be sure of that.

Q. What amount of gas would a main sixty inches of that length deliver in the course of a day?

A. It depends upon the pressure applied to it.

Q. Yes, I know that. What pressure would you apply to get the full efficiency?

A. I might apply ten pounds or ten inches; it depends upon conditions.

Q. Ten pounds would be how many inches?

A. Ten pounds would be around 280 inches.

Q. Would your holder stand that pressure?

A. No, sir.

Q. Then you would not apply that pressure, would you?

A. Yes, by the intervention of a pump between the holder and the main.

Q. Would your pipes stand it?

A. Oh, yes.

Q. Do you think you would use ten pounds pressure?

A. Not unless I was obliged to.

Q. Well, if you were obliged to, take that, then; how much gas at that pressure would a pipe of sixty inches, and the length of that tunnel, deliver?

A. Without an opportunity to make a long calculation on the subject, I should say it would deliver approximately ten million feet in an hour.

Q. That is one pipe?

A. One pipe; that is an approximate figure.

Q. Then you could deliver fifty million feet per hour
119 through that entire outfit?

A. Through the entire outfit, yes.

Q. If you delivered it at that pressure, what would be the effect upon the holder to which you delivered it?

A. It would have no effect whatever, because when the delivery end of the pipe was opened into the holder there would be no more pressure on the holder; the gas would instantly expand and lose its pressure.

Q. That would be up to the capacity of the holder?

A. Up to the capacity of the holder.

Q. And if you exceeded that?

A. Then I should change the valves and change the gas into another holder.

Q. Have you holders sufficient to receive gas to that amount?

A. Not now; we were speaking about twenty-five years from now when the plant is finished.

Q. Do you contemplate delivering gas at any such pressure on your 60 inch main that is now constructed to run through the river tunnel?

A. We have not contemplated that as yet, but it is perfectly feasible to do so if we so decide.

Q. Now, we have had the possibilities. What would be the usual pressure at which you would deliver gas, what have you calculated you would ordinarily use?

A. The usual practice is, and will be, to deliver at holder pressure.

Q. What is that?

A. About 12 inches.

Q. And delivering it at 12 inch pressure, can you state without a long calculation, how much gas per hour a main of 60 inches in diameter, the length of feet that that tunnel is long, would deliver?

A. Perhaps 3,000,000 feet; these figures are all approximations.

Q. 3,000,000 feet per hour?

A. Per hour.

Q. The cost of the plant at Astoria then would be about
120 $9,217,441.72, excluding the land and tunnel?

A. If that is the figure; I have not made that calculation. (Calculates) $9,217,441.72.

Q. Now, can you give us the items that go to make up this cost of the plant of $9,217,441.72?

A. I can give you the items; whether they will absolutely balance or not I do not know. No, I cannot give you those items without a little time for preparation, and to pick them out.

Q. Then we will not trouble you at this time. All of the items, however, that go in to make up this cost, are collected in the books of the company at 4 Irving Place?

A. Yes, they are accessible.

Q. And also filed there are the original contracts and certificates that have been given by you?

A. Yes.

Mr. MATTHEWSON: Except that he stated there were some new additional constructions which were not under contract; of course there would be no contracts for those, and they would not be on file anywhere.

Q. What is the additional construction that is not included in the total expenditure up to date?

A. I do not think I understand the term "additional construction."

Q. You have stated that there were some things that were not included in this; I mean that, just what it is—whether it is some particular machine or building?

A. No, it is a number of contracts that are still unfinished.

Q. And on which the work has not been commenced?

Mr. MATTHEWSON: I do not think you understand Senator's Page's question, or else I did not. Don't you mean the total expenditure on contracts actually made?

121 Mr. PAGE: Exclusive of the $8,522,000, which includes some outstanding liabilities not yet paid.

Mr. MATTHEWSON: On contracts?

Mr. PAGE: Precisely.

Mr. MATTHEWSON: You asked what would be required beyond those payments made on existing contracts?

A. The allowance I gave for those I think was $1,460,000. There are 35 contracts yet pending and under construction.

Q. And the total of the amount outstanding on those is the $1,460,974.97 that you spoke of?

A. That is correct, sir.

Q. That was included in $8,522,490.01, was it not?

A. That was included in that, yes.

Q. Now, is there any additional construction that is not under contract, and is not included in that amount?

A. Yes, there are contracts to be made yet for further construction, to come yet, before completion.

Q. What I want to know is, what particular building or machine that would be, that is still to be constructed and contracted for, or pipes, or whatever it is?

A. One further construction must be a water works, for supplying water to the plant. Then there must be additional electric plant put in to supply electricity for power; then there are a great many connections, pipes and sewers, steam and water and a large amount of small work, as we call it, work small in itself, but important, to be still provided.

Q. You have done considerable filling in of land at Astoria?

A. Yes, we have.

Q. Is that included in the expenditure of $8,522,490.01?

A. Yes, the grading and filling is part of the expense.

122 Q. And I suppose at the office at 4 Irving Place, we could get at the amount of the expenditures for grading and filling?

A. Yes, you will find it there separated.

Mr. PAGE: I would like to ask the other side to produce the books of accounts, contracts and certificates relating to the construction at

Astoria for the purpose of further cross-examination of this witness. Are you going to sit mute?

(Mr. Matthewson nods.)

Mr. PAGE: Mr. Matthewson states that he sits mute. I have made a request of the other side and I suppose that the plea must be taken that Mr. Matthewson stands mute. I ask the Master to direct the production of those books and papers for the purpose of further cross-examination of this witness.

The MASTER: I do not see that there is any application pending before me.

Mr. PAGE: I made one.

The MASTER: You ask Mr. Matthewson to produce his books.

(Mr. Page's request is read by the stenographer.)

The MASTER: Have you any objection to doing that, Mr. Matthewson?

Mr. MATTHEWSON: Mr. Garver stated the position of the company in reference to the production of those matters yesterday, as I understand it, and I would not feel justified in saying that I would furnish them until I had had an opportunity to consider the subject.

Mr. PAGE: I would suggest that upon this branch of the cross-examination of this witness that be suspended until such time as Mr. Matthewson can consult with Mr. Garver and give us an answer.

123 The MASTER: You can proceed with the cross-examination, and if it is not finished or you want any further information on this matter you can recall him. You can suspend and take it up later subject to the convenience of the witness.

Mr. PAGE: Yes, I was going on with other branches.

Q. One other question on this branch before we leave it, suggested by Mr. Gans. The water works which you are to construct—will they be sufficient for the entire plant of twelve units, if you complete it?

A. If we can find sufficient water. Up to this time we have not been able to find it.

Q. You have some water works there now, have you not?

A. We have a well that we put down experimentally, for the purpose of getting water for boilers, such as we use, but nothing like the capacity that will be required for the works.

Q. That is for the one unit?

A. Yes, for the one unit.

Q. Then you may not be able to get sufficient water to justify you in building those water works; is that right?

A. No, sir, I do not recognize that possibility at all. It is simply a matter of must get the water. It is undoubtedly in the ground and we can find it.

Q. Yesterday you gave testimony concerning certain disbursements for repairs, additions and replacements, at the various operating plants of the company. From what source did you derive information to enable you to give those figures?

A. From the accounting department?

Q. You testified from a paper. Was that paper made up by the accounting department?

A. Made up for me by the accounting department.

Q. And was not prepared by yourself?

124 A. I did not make the figures; no, I went over and revised them after they were made.

Q. Have you that memorandum with you?

A. Yes, here it is.

Q. The testimony that you gave related to the repairs, additions and replacements that had been made for the various plants, from 1884 to October 31, 1905?

A. Yes, sir.

Q. Were the segregations of the items applicable to replacements, additions and repairs made by you?

A. They were made under my direction, not by my hands. They were made by the returns sent in from the engineer's department to the accounting department.

Q. The returns that were sent in by the engineering department, would they specify how much was expended for repairs, how much for additions and how much for replacements?

A. Precisely.

Q. That is, you made those calculations?

A. Yes, the accounting department has no way of getting the figures except from the engineering department.

Q. So they get the figures from the engineering department?

Mr. MATTHEWSON: There is no way of subdividing except by the engineering department. The accounting department would not know.

Q. Where are the original bills upon which those entries were based. Are they in the accounting department or the engineering department?

A. They are in the accounting department.

Q. Have you any books of account or other records in your department that would show those respective items?

A. I do not keep them, no, sir.

Q. You do not keep any books of account in your department?

A. That is, accounts of this character. I keep accounts re-

125 lating to the making and sending out of gas and all those accounts, but not financial; that is turned over entirely to the financial department.

Q. Of course it would be impossible for you to give any of the items that go into these totals, without going to the books of the company?

A. Except in the most general way.

Q. You have no independent recollection—— I mean by independent recollection, recollection independent of the memorandum that has beeen prepared for you by the accounting department of those various items, have you?

A. No independent recollection? I don't quite understand that.

Q. Well, you could not have prepared that statement from your own recollection?

A. No, sir.

Q. And all you have had before you or in your mind are the separate independent items that you have from time to time sent to the accounting department, and which have been by them entered and brought together in these totals?

A. Yes.

Q. So you would have no means of stating how much has been expended at the 14th Street plant, for instance, for either additions, replacements or repairs?

A. Not in detail.

Q. Nor in aggregate?

A. In a general way. I can state what work has been done chiefly in the way of additions or replacements, but not going into it to the extent of endeavoring to bring the figure up to this amount, because there would be undoubtedly many things I would leave out and forget.

Q. Well that covers a period of 22 years.

A. Yes, my memory——

Mr. MATTHEWSON: It is not equal to that.

The WITNESS: It is not equal to that.

Q. Therefore what you are testifying to in regard to these items of additions, replacements and repairs and the total of them
126 is derived entirely from the statement prepared for you by the accounting department?

A. Precisely so, yes, sir.

Mr. PAGE: I would now make the same request of the attorneys representing the complainant for the books, contracts, and certificates from the engineering department that enter into the items of additions, replacements and repairs, as testified to by this witness.

Mr. MATTHEWSON: For 22 years?

Mr. PAGE: Yes.

Mr. GANS: We will take them year by year.

Mr. MATTHEWSON: You might as well apply to the Court at once for an extension of time, if you are going into it to that extent. There are millions of them. I make the same reply that I did to your other request.

Q. How is the pressure that is delivered from your gas holder to the mains, or distributing system regulated?

A. Regulated by means of a valve or valves at the outlet of the various holders where the gas is admitted into the mains from the holders.

Q. Does that valve work automatically?

A. No, sir; not in all cases; in some cases we have what are termed governors, which do work automatically, but the valve is much the best arrangement.

Q. Well, the automatic governor can be set at a certain pressure, and will deliver gas continuously at that pressure, will it not, no matter what the consumption may be?

A. That is, if the consumption increases.

Q. Well, the automatic governors can be set at a certain pressure and will deliver gas continuously at that pressure will it not, no mat-

ter what the consumption may be? That is, if the consumption increases, the valve is opened by the governor sufficient to
127 keep the pressure equal?

A. It maintains a uniform pressure at a given point.

Q. Well——

A. That point is where the governor is situated.

Q. That is what I mean.

A. The pressure may vary a mile or two miles from there; it may vary considerably and the governor never would know it unless it varied sufficiently to draw the pressure down—I am speaking of pressure going down now—unless it varied sufficiently to draw the pressure down back down the line to the governor.

Q. How far is the governor efficient?

A. My personal opinion is that a governor is not an efficient instrument in any case, and while I say we have some governors that work, I never allow them to work without a man standing alongside of them to watch it.

Q. Well, the valve is operated how?

A. The valve is operated by hand, by a man—the same man whom I say watches the governors.

Q. Then you have both do you, the governor and the hand valve?

A. Yes.

Q. At all of your distributing stations?

A. Not at all of them; we have at some. A very much—may I go on?

Q. Certainly.

A. A very much better arrangement is the one that I spoke of yesterday that I put in seven of them during the past year in the endeavor to find a way to better regulate pressure. That consists of a float which is set, which indicates pressure at a point at any distance you may elect to put it from the source of supply, preferably where the pressure is low. Those are the points we aim to look out for, because we do not wish the pressure to go down to the dangerous point. This machine located at that point is connected by wire with another similar indicator in the room where the man is en-
128 gaged supplying the gas. He regulates his pressure there to maintain a given pressure here (indicating).

Mr. MATTHEWSON: What do you mean by here?

The WITNESS: At the end of the line, at the first described instrument, a mile or two miles, as the case may be, from the plant. He gets back every minute or every half minute or as often as he likes the exact registry of the pressure at this distant point, and he admits sufficient gas into the mains to maintain the pressure at that point.

Q. I understand that you have mains practically in every street in the Borough of Manhattan?

A. I think every open street in the Borough of Manhattan.

Q. And in some streets more than one?

A. In some streets several, yes, sir; in some streets ten.

Q. And probably in all streets more than one?

A. No, not in all streets, but perhaps in a majority of the streets, I may say, more than one.

Q. And this entire system as I understand it is connected and interlocked at the corners?

A. They are, so far as it is possible to accomplish it. The gas from different stations is supplied in different districts, and those mains are connected together fully and completely. They are also connected to the mains in other districts where it is necessary to supplement or increase the supply in certain localities which we have found to be deficient or unsatisfactory in the supply, and there we connect them together for that purpose.

Q. Then, as I understand it, the city is divided into districts, a certain district being furnished from a gasholder in that district?

A. No, sir. For instance, one district is from Grand Street to the Battery.

129 Q. Yes.

A. From Grand Street to the Battery, south. The plant that supplies the majority of the gas in that district is the 21st Street plant, situated at 21st Street and East River.

Q The holder is there?

A. The holder is there.

Q. And the gas is brought down in a trunk main from Grand Street?

A. From Grand Street, in several trunk mains. There are four or five large mains that supply no gas from there to Grand Street.

Q. Until it reaches Grand Street?

A. Yes.

Q. You would call that the trunk main, would you?

A. Yes; the feed main or supply main, yes, trunk main.

Q. Well, I am not a gas expert and I wanted to get the technical phrase?

A. A trunk main is as good as any.

Mr. MATTHEWSON: It is sometimes called a pumping main?

The WITNESS: No; that is distinct from that.

Q. Then the trunk main at Grand Street is connected with the distributing mains?

A. Yes, sir, and some of the trunk mains run below Grand Street as far as Canal Street to deliver the gas further down.

Q. How many trunk mains have you running from the 21st Street station into this territory south of Grand Street?

A. There is a 16 inch and a 20 inch—I am speaking now from memory, I have not the record with me—a 16 inch, a 20 inch, an 18 inch and a 24 inch; there are three or four, I cannot recall them now, perhaps five.

Q. Those are the dimensions of the pipe?

A. Yes. And in addition to that we have a 24-inch main which runs from the plant down through the various streets and de-

130 livers gas at Beaver and Whitehall Streets—you know this is all under ground and I have not seen it for a great many years. Those figures that I was recalling are the inches. That main is intended to deliver gas into the lower end of this same district.

Q. Now at the point where the trunk main is connected with the

distributing system for that particular district, have you any governor or pressure regulator?

A. No, sir; there is none required there.

Q. Why not?

A. Because we have some difficulty in getting gas down there at sufficient pressure without attempting to regulate it after it gets there.

Q. Well, it would be perfectly practicable and feasible, would it not, to send gas through this trunk main at a high pressure, and reduce it where it is connected with the distributing system by a district governor or regulator to the pressure desired in the distributing system?

A. We do that now.

Q. Where?

A. This 24-inch main that I just spoke of, we have at times as high as three and four pounds pressure in that main.

Q. And that is reduced when it is connected with the distributing system at Beaver Street, and——

A. It reduces itself; we do not get any more pressure down there than we require with that initial pressure at 21st street.

Q. That is the friction.

A. The friction.

Q. And the gas passing through the pipe?

A. Yes, sir.

Q. Reduces the pressure from four pounds at 21st Street to what at Beaver Street?

A. To two or three inches at Beaver Street. If I may be permitted to say something right here——

Q. Yes.

A. There are other gentlemen who will probably be called as witnesses who can give the facts and figures absolutely in detail, better than I can. I am familiar with them in a general way.

Q. And my questions are intended to be general, largely
131 as addressed to you?

A. Yes. All these things are capable of being absolutely demonstrated by those who have them in direct charge.

Q. Yesterday you spoke of a difference in altitude, making a difference in pressure?

A. Yes, sir.

Q. Do you know what difference it makes?

A. What difference?

Q. Well, an increase of ten feet in altitude will increase pressure how much?

A. An increase of ten feet in altitude. I have a table here which I prepared on that subject (producing book). With a specific gravity gas of 600, an increase of ten feet in altitude will make an increase in pressure of 59 one-thousandths of an inch, or an increase of one-tenth of an inch in every seventeen feet.

Q. In every seventeen feet one-tenth?

A. Yes, that is easier to get at.

Q. That is, with gas a specific gravity of 600?

A. 600, or 6/10.

Q. Taking air at one?
A. Yes.
Q. Gas of that gravity would be what candle power?
A. Well——
Q. What I am getting at, put it this way——
A. Gas of that specific gravity may be any candle power.
Q. Is not there any relation between the specific gravity of gas and the candle power?
A. Well, some, but not to any extent. If the specific gravity is due to carbonic oxide it will be a very low candle power, and if it is due to illuminants, a very high candle power, and all those are due to different constituents of the gas, as the greater or less proportion lessens or increases. Gas of 600 specific gravity might be 20 or might be 50.
Q. Is 600 about the usual specific gravity of your gas?
A. Yes. Of course it varies from time to time, but it is about that.

Q. Now you state that in certain parts of the city you de-
132 liver gas at an altitude of 250 feet, I believe you said, above the works?
A. Yes, about that.
Q. Where is that section?
A. That is up in the vicinity of Fort George and around on Lafayette Boulevard and Fort Washington, Washington Heights. I cannot give the exact locality without referring to books.
Q. Well, practically it is that part of the city that is on the ridge beginning at about 130th Street on the West Side?
A. Yes, sir.
Q. And extending up to Inwood?
A. Yes.
Q. Don't you carry a separate trunk main to that section of the city to deliver gas at that higher altitude
A. Yes.
Q. And if you were to deliver gas to any section of the city that was in a higher altitude than another section you would carry a separate trunk main, would you not?
A. No, sir, not necessarily.
Q. Well, would not that be the most effective manner of doing it?
A. It would be a very expensive way of doing it and I doubt whether it would be considered an efficient way.
Q. You are familiar with Newbigging's book, a handbook for gas engineers and managers?
A. Yes, sir. I have it, I have a copy of it in my office.
Q. That is considered one of the authorities, is it not?
A. For English practice. English and American practice are different in a great many respects.
Q. No, the laws of gravitation are the same in England as in America?
A. Pretty near.
Q. And the general physical laws are the same which regulate and cover the delivery of gas?
A. Yes.

Q. There is no American work on gas engineering, is there, or handbook for gas makers?

A. Well, perhaps not exclusively devoted—let me see—yes, there is a book which was pubished a number of years ago by a
133 man named Mooney who died a number of years ago, William Mooney.

Q. But all of the standard works on gas engineering are English works, aren't they?

A. With the exception of the various engineer's handbooks, that touch and treat on gas in accordance with American practice, where gas is a part of the general make-up of the book.

Q. That is, those would be general works that would treat on the subject of gas engineering in a general way?

A. In a general way.

Q. With other branches of engineering science?

A. Yes.

Q. Now I will read you what Newbigging says on that subject of delivering gas at different levels: "For the supply of gas to varying levels, therefore, separate leading mains with the station——

Mr. MATTEWSON: Just a second. Will you allow me Senator——

Mr. PAGE: I have not finished my question yet.

Q. (Continuing:) With a station governor upon each are highly advantageous and should be employed wherever practicable." Do you agree with that?

A. Yes, if we make special emphasis—if we place emphasis on the word "practicable."

Q. Well, does not that entirely overcome the objection that you raised here yesterday that it was absolutely impossible to control pressure in your distributing system, because you delivered at various levels, with sometimes a difference of 250 feet?

A. No, it does not.

Q. If you carry your trunk main to the level of the 250 foot plane, it would not affect the distributing system of another trunk main which was 250 feet below, would it?

A. But if there were streets and houses and consumers at
134 different levels all the way up this incline, as there is in New York, it would be a matter of a little difficulty to place this governor so that all hands would be regulated properly and correctly and within the law.

Q. Then except to the streets that are on the side hill, going up to this plane, you could do it?

A. If there was too much difference of elevation between the consumers on the streets on the side hill, and the consumers at the top of the hill, I would still be violating the law between the narrow limit of one-half and one inch pressure. When I gave the consumers half way up the hill sufficient gas for their needs, the consumers at the top would probably get more than the law would allow me to give, even with the governor.

Q. Well, you say the pressure varies one-tenth for every 17 feet?

A. Yes.

Q. That would be an inch for 170 feet, would it not?

A. Yes. But I must start out with my low level pressure, at pretty close up to two inches, probably, then I only get a very small leeway for the additional distance. My consumers half way up the hill must be supplied properly, and then I am only left perhaps half an inch for the balance.

Q. How much is the loss in pressure, by friction have you any tables that show that?

A. Well, it depends—yes, there are tables of that kind, but I have not any with me. It is very considerable, but very much less with gas than with water.

Q. Is not that one reason that gas works are always situated in the lowest part of a section in which it is to distribute to allow this increase in the pressure to offset the friction?

A. It is considered the best practice, to situate gas works at low levels.

Q. And it is for that purpose, is it not?

135 A. For that purpose, and the works are benefited thereby in that they do not have to carry such heavy pressure.

Q. And it also gives a more equal distribution of pressure, does it not, throughout the distributing system?

A. Yes.

Q. Now it is perfectly practicable, is it not, to divide your city into districts and place district regulators or governors at different places throughout the city?

A. Theoretically it is practicable. Practically there are serious objections to it.

Q. Well, what are they practically?

A. The defendants are forcing the consumers in a great city like New York to depend upon the automatic action of an automatic governor buried somewhere in the street, or an automatic governor situated in the basement or on the first floor of a building. If the city was districted off in that way and each district supplied through a governor, it would be a matter of very grave doubt whether at times this governor would not fail to operate, like all automatic machinery, and with an important, and I might state a dangerous element, as gas is, it is not wise to introduce any element that adds to the danger. And in my opinion district governors do add to the dangers of interruption and difficulty with gas supply.

Q. Well, are they used in many cities?

A. They are used in many cases. Perhaps where they have more nerve than I have.

Q. Do you know of—well, you speak individually, of course?

A. Individually, yes.

Q. Not more than the company has. The lower the pressure of the gas so that it is delivered with efficient pressure to burn at all, the more efficiency you get out of it?

A. No.

Q. If the gas is sent to the tip at a low pressure, you get more illumination from it, do you not, than if it is fed to the tip at a high pressure?

A. If the tip is constructed for that purpose to deliver the
136 best results at a given pressure, at that pressure the tip gives the best results.

Q. Is that a matter which is regulated by the tip, or is it matter which is regulated by the physical laws of the combustion of the gas?

A. It is a matter that is regulated by the tip, by the burner through which the gas issues, to burn.

Q. I would like to have you explain that, if you do not mind taking the time.

A. I can explain that perhaps better, by way of illustration. If you have a chandelier in your house with two burners, you put on *on* one end of the arm a burner that is calculated to give the best efficiency to a certain gas at a certain pressure; you get that from it, whatever that pressure may be, whether it is half an inch or two inches. If, on the other end you put another burner alongside of it that is not calculated to do that, you get very inefficient service. The efficiency of the gas in the consumer's house, given a gas that is properly made, is regulated almost entirely by the consumer's fixtures and the way he uses them.

Q. And is not affected at all by pressure?

A. Not to any appreciable extent. I mean to say within reasonable limits. I do not mean to say if I put on 10 lbs. pressure it would not be affected, but I mean to say within the reasonable limit of gas pressure supply.

Q. When you test the candle power of gas, at what pressure do you deliver the gas to the burner?

A. We deliver five feet through the burner and use any pressure that is necessary to put the five feet through. The burners are usually designed to burn that five feet with a half-inch pressure. But that is not——

Q. Is not that the same pressure that you give out to your consumers?

A. That was many, many years ago. In these days of new
137 burners and water gas of the higher candle power that requirement of pressure of half an inch is obsolete and has been for many years.

Q. You mean to say then that in testing the candle power of gas at your works that you pay no attention whatever to the pressure at which the gas is delivered?

A. Except to get such pressure as produces a consumption of five cubic feet of gas through the burner. Now I will qualify that a little bit by saying this, if for any reason it was necessary to put an uncommon and unusual pressure on, that would be looked into and corrected. It is within the reasonable limits of pressure.

Q. If you took that same burner that would burn five feet and give 22 candle power at a pressure of one inch and you should increase that pressure to, say three inches, what would be the result?

A. If the additional pressure did not cause the burner to flare or to shriek or to make an uneven, ragged flame, you would get a candle power due to the increased quantity that you burned.

Q. That is, the increased pressure would give you increased candle power?

A. An increased illumination in direct proportion to the amount of gas burned, provided the flame was maintained in proper shape. If it got out of order, why——

Q. Frequently, before the flame flares or shrieks you see a very large increase in the dark portion of the flame, so to speak?

A. Yes.

Q. And no particular increase in the illuminating part of the flame?

A. The reason of the dark centre of the flame is because as it issues from the burner it is not inflammable and it requires a sufficient time to become mixed with air from the outside before it will become inflammable, therefore, the particles of carbon in the gas do not get heated up in this blue part until they get to the higher zone,
138 where it is mixed with sufficient quantity of air to burn.

Q. Does not that also show an imperfect combustion?

A. No, not necessarily. It would show perhaps an imperfect burner, a burner that was not efficient. that was not properly designed for the quantity of gas being used.

Q. These burners were adjusted to the same standard, were they?

A. The burner department, Senator, is not under my charge, I don't know that. That is foreign to my end of the business. I cannot answer that.

Q. You did not hear Professor Chandler testify before the Stevens Committee, did you?

A. I heard a portion of it.

Q. In which he gave a table showing the increased amount of gas consumed, and increased illuminating power under different pressures?

A. I am not sure; I know I heard part of his testimony, I don't recall it, anyway.

Q. Well, you can take a five foot burner, and by increasing the pressure, you can consume through that burner eleven feet per hour, can't you?

A. Yes, sir, but not satisfactorily to the consumer.

Q. No, not satisfactorily to the consumer; and why not?

A. In the line of illumination he would not allow it, because if he did he would immediately turn off until he got some light; he would get very little light at that. If I could go into every consumer's house in New York, and regulate the burners, I could settle all this business, but I cannot do it.

Q. Yes, I suppose you would settle it by turning the valve at the meter or by turning——

A. (Interrupting.) I would use common sense to regulate the supply the same as a man does when he goes in the bathroom
139 in the morning and the water flies all over the floor. He don't cuss the water, he turns it off.

Q. Yes. Then there is another part to that, isn't there, and that is that the gas should be delivered at such pressure as to produce the best results without the consumer having to be a gas engineer to regulate it?

A. That we endeavor to do, Senator, to deliver the gas at a pres-

sure that will produce the best and most satisfactory results to the consumer.

Mr. MATTHEWSON: You do not deliver water at a pressure at which you must keep the faucet fully open in order to get the best result.

The WITNESS: I don't know why I should be expected to regulate the pressure of gas all over the area of New York City any better than the City of New York regulates the water pressure. The same principle underlies it.

Q. The principle is entirely different, isn't it?

A. Not at all. The principle is entirely the same, except in the matter of reversing it; at the high point you get a low pressure, and at the low you get a high pressure with the water. There is the only difference in it.

Q. There is no variation in the pressure to water?

A. Variation in the head, whether the reservoir has more or less water in it, but you will never find at the lower part of the city the same pressure you will find in the upper part of the city, and it cannot be regulated any more than I can regulate the gas.

Q. Well, as you get farther from the works the pressure diminishes?

A. The pressure diminishes.

Q. Could a trunk main be carried up to a certain point and there locked in to the distributing main to give a uniform pressure.

A. That is done in a great many cases to-day in New York.

Q. So it is a practical and feasible thing to do?

140 A. We have that system in operation and have had it for years, there is nothing in this high pressure distribution that I don't thoroughly understand.

Q. Yes, I think that is generally conceded, that the high pressure distribution has been pretty fully studied and developed by the company.

Mr. MATTHEWSON: Do you want this to go in the testimony?

Q. Do you deliver gas as high as four-inch pressure in the distributing mains?

A. Yes, higher than that.

Q. To the consumer?

A. At the point where the pressure is applied; it of course loses as it gets toward the consumer and that four inches pressure by reason of friction and a draught on the mains is reduced at distant points to perhaps one inch.

Q. But the consumer that lives near the point of distribution gets his gas at the four-inch pressure, does he?

A. No, very few of them get their gas at four inches pressure; the pressure is drawn down almost immediately after it leaves the works, the draught on the mains. I tried one experiment at one of our plants where we had six inches pressure registered on the gas in the house, in the valve house, and 500 feet from there we only had three.

Q. Was that point 500 feet distant lower than the gas house?

A. No, sir; level. That is, practically level with the continuation of the main right out of the works.

Q. That would not obtain generally, that there would be such a loss as that, would it?

A. I am rather under the impression there may be some stoppage in the pipes, but that I am not certain of. I never found it. But the pressure does reduce very rapidly from the valve, that we know.

Q. You stated that one reason you had to have an increased
141 pressure was from the fact of insufficient piping in the house and of service pipes, and that it was necessary to maintain a heavy pressure in the street main to deliver the quantity of gas desired in the house?

A. Insufficient house pipe. I except the services because they are under our control and when they are insufficient we renew them and make them good.

Q. Now in some sections of the city you have pipes that were laid a number of years ago, haven't you?

A. Yes, sir.

Q. When the consumption was very much smaller and in order to force the quantity of gas that is now delivered in that section through those pipes the same argument would apply, wouldn't it, that you use a heavier pressure?

A. If the pipes had remained in the same condition, but we have spent a great many thousand dollars amounting to up over the hundreds in New York City, which can be demonstrated by some other witnesses better perhaps than I, in taking up and relaying small pipes. We lay nothing now less than one-eight-inch pipe; in the old days three and four was common, and where the streets were repaved, where they have been repaved in the past by asphalt, wherever we found a street to be repaved we make an examination and if the mains are small take them out and put in larger ones. That has been our universal practice for years.

Q. Then one of the reasons for maintaining this high pressure that was given before the Stevens Committee would not obtain now, and that was the increased consumption on these inadequate pipes requiring a heavier pressure to deliver gas.

A. I do not recall any such testimony. I gave none. Houses were originally piped for light and light only; now they are
142 using gas ranges and all manner of gas heating and cooking appliances; necessarily the pipes are too small in the houses and we have to supply gas sufficient to supply their wants.

Q. What pressure does a gas holder ordinarily give?

A. I would have to take some particular gas holder, because every gas holder differs in pressure, dependent entirely upon the weight of the metal from which it is made. The modern gas holders that are being built now give with all sections hooked—inflated to the full extent—about 12 inches pressure.

By Mr. MATTHEWSON:

Q. You refer to the large five million feet holders or smaller holders?

A. The large holders. Smaller holders generally give less. There has been more change perhaps in the construction of gas holders in

the last ten or fifteen years than in almost anything else connected with a gas plant.

By Mr. PAGE:

Q. Well, they are generally calculated by the weight of the holder and the number of cubic feet, so as to produce about a standard pressure?

A. No, they can be, but that is not ordinarily done.

Q. Well, as a matter of fact——

A. Yes, if a man is to make a contract for a holder that he wants to give—that he requires to work at a certain pressure, it is a very simple mathematical calculation to find out what it shall be and the weight of the metal, the producing pressure.

Mr. PAGE: That is all I have to ask on the subject of pressure.

The MASTER: Recess until two o'clock.

143 After Recess.

GILBERT FRANCKLYN, recalled and further examined, testified as follows:

On page 2 of Complainant's Exhibit 48, as presented heretofore by me, is a plot marked "Deeded by Consolidated Gas Company to the New York Edison Company." This should have read to "New Amsterdam Gas Company." I desire to correct my testimony accordingly, and, with the consent of counsel, have written "New Amsterdam Gas Company" in Exhibit 48, in place of "New York Edison Company" at that point.

Cross-examination of WILLIAM H. BRADLEY continued by Mr. PAGE:

Q. I show you Complainant's Exhibit 48, and ask you whether page A, which is devoted to the Astoria Light, Heat & Power Company, shows that property in its present condition, or the condition it is contemplated it will be in when the work is completed?

A. It is shown there as it will be when the filling, grading and docking is completed, not as it exists to-day.

Q. Does the estimated cost as you expressed it this morning include the filling, grading and docking of this property to the condition shown on page A of Complainant's Exhibit 48?

A. It does not.

Q. That merely had reference then to the work which had been done along those lines up to date?

A. To the work that has been done and is projected, which will be the completion of this portion (indicating on map) to some point beyond the easternmost dock shown on the exhibit.

144 Q. You are referring to the northernmost portion of what would be called the bulkhead line; that is what this would be called, would it not?

A. We have named that the Inshore Bulkhead.

Q. We will call it that then, which is a good name for it—the inshore bulkhead line west of Berrian's Island?

A. About one-half of the area covered by the Inshore Bulkhead, up to this point here (indicating). I cannot designate it exactly.

Q. Up to a point of the Inshore Bulkhead line that is opposite the northwesterly edge of Berrian Island, as it is contemplated to be filled, shown on the exhibit?

A. Yes.

Q. Can you state approximately how many acres you have filled in already?

A. I cannot; I have never made an estimate or thought about it.

Q. I suppose a tunnel that would carry the product of the one unit that is now built would be a much smaller tunnel than the one you contemplate building?

A. A tunnel much smaller would carry the product of the single unit, undoubtedly.

Q. And if that was all that you were going to build, you would have built a much smaller tunnel?

A. Yes, sir.

Q. Can you tell about what such a tunnel would cost?

A. A small tunnel?

Q. Yes, capable of carrying the product of the present unit.

A. I have never estimated on a small tunnel, one of that size; I should say about one-half the cost of the present projected tunnel, $1,325,000.

Q. What would a three-unit tunnel cost—that is, I mean by that a tunnel of the capacity to carry off the product of three units?

A. Possibly fifty per cent. more.

Q. Fifty per cent. more than one unit?

A. Yes.

Q. The product of three units would exceed the production of your entire plant on Manhattan Island now, would it not?

A. Yes, it would.

Q. And a twelve-unit works would exceed very largely the
145 entire production of gas on Manhattan Island and the Bronx at the present time?

A. It would.

Q. It would be more than double, would it not?

A. About double.

Q. What is the purpose of preparing works of that size?

A. The purpose that I originally started out with was the transfer of all the gas manufacturing establishments from Manhattan Island to this Astoria plant shown on this exhibit.

Q. And also to allow for the increase in production?

A. (Continuing:) That would take a good many years to do, and the gas consumption or use in New York City doubles about every twenty years.

Q. Now, the engineering force that has been used for the production of this plant, is that paid for by the Astoria Light, Heat & Power Company or by the Consolidated Gas Company?

A. That is a question for the financial officers of the company to answer; they can more readily answer it than I can.

Q. What is your official position to the Astoria Light, Heat & Power Company?

A. I am chief engineer of that as well as of the Consolidated Gas Company.

Q. As chief engineer of the Astoria Light, Heat and Power Company do you receive additional compensation to that which you receive as engineer of the Consolidated Gas Company?

A. That is also a matter of book keeping; whether a portion of my salary is charged to the Astoria Light, Heat and Power Company, as a matter of finance or bookkeeping, I do not know.

Q. As far as the results to your pocket is concerned, there has been no appreciable increase?

A. No, it is all the same.

Q. It has been necessary to increase the engineering force, has it not?

A. Very materially; yes, sir.

Q. To what extent, over the force that had been main-
146 tained by the Consolidated Gas Company prior to your taking this work?

A. I had to double it, at least.

Q. Can you state what amount would represent that?

A. I cannot without going over the payrolls, books and records.

Q. You testified yesterday to the manufacture of coal gas. What do you use under the retorts?

A. Under the furnaces, for heating the retorts?

Q. Yes..

A. Coke.

Q. And you use the coke that is produced by the plant itself?

A. By the distillation of the coal.

Q. Can you state how much coke you use under a retort for a thousand cubic feet of gas produced?

A. I have access to all those figures in my office, but I have not them with me. In good practice it is perhaps 12 to 15 pounds of coke to 100 pounds of coal.

Q. How many thousand cubic feet of gas will a ton of coal produce?

A. Slightly varying quantities, generally estimated at 10,000 feet.

Mr. MATTHEWSON: You mean coal gas?

Mr. PAGE: Yes.

A. (Continuing:) Coal gas entirely; that is what we have been speaking of. Some coals produce more, some less.

Q. At your 14th Street plant it averages between ten and eleven, does it not?

A. It might be slightly over ten, but ten thousand is the usually accepted figure for estimating; I say for actual work I will have to go to my data in the office.

Q. After the gas is distilled from the coal you have a by-product of coke?

A. Yes.

Q. And how much coke is produced by a ton of coal, I mean a gross ton of 2,240 pounds?

A. About 1,500 pounds.

147 Q. That is what is called a caldron of coal?

A. Yes, what the English usually term a chaldron; it is not used in this country.

Q. Then as the gas passes into the hydraulic main, what by-product do you recover there?

A. Tar and ammonia, ammoniacal liquor.

Q. In the hydraulic mains?

A. Some is deposited in the hydraulic mains, and some goes on and is found in the washers, scrubbers and condensers.

Q. How much coal tar do you produce from a ton of coal?

A. About twelve gallons to the ton, varying according to the heats of the retorts.

Q. That is about the lowest, isn't it?

A. It is a variable quantity, we may get fifteen, we may get twelve. As I say, Senator, I am answering these questions without any data whatever. If I had known you were going into this line I would have had some things with me.

Q. How many pounds of ammonia; can you state that from memory?

A. Ammoniacal liquor to the equivalent of about 22 pounds of ammonia, if my memory serves me right. Ammonium sulphate that should be, not ammoniacal liquor.

Q. That is after it is treated with the salt?

A. After it is made.

Q. Sulphate of ammonia?

A. Sulphate of ammonia.

Q. That is all the by-products that you produce, isn't it, at your coal plants?

A. That is all.

Q. I understand at your plants at Astoria you expect to recover cyanogen?

A. That is the present intention.

Q. How much cyanogen do you expect to produce from a ton of coal, about?

A. That is pure speculation. There is no data in the United States for cyanogen that has ever been recovered as a by-product in a gas works. In England and in Germany they produce

148 from three to five pounds of prussiate of potash per ton of coal, but whether the American coal will yield that quantity or what it will yield is simply absolute speculation.

Q. Have you made any experiments at all to ascertain?

A. I have not.

Q. What additional plant would you have to use for the recovery of the cyanogen?

A. We have to put in what are termed the cyanogen washers; they are vessels similar to the ammonia scrubbers, but used with different material.

Q. You make no effort to recover the sulphur from your purifiers or to utilize the——

A. We have made a great many efforts to sell it to people, recover it, but we cannot find a market for it.

Q. Well, the spent oxide is used very largely, isn't it, in the production of sulphuric acid?

A. For an inferior quality of sulphuric acid. Our chemical manufacturers with whom I have corresponded and talked and given—I gave away 100 tons here some time ago for the purpose of trying to establish a market and they reported back that the resulting sulphuric acid that they obtained was so discolored that they could find no use for it.

Q. You know that in England the mass, after it becomes spent oxide is sold at a profit?

A. We have sold some in these parts; perhaps ten or twelve years ago we sold some, but we cannot find any market for it now, for what reason I cannot say.

Q. Do you know whether the U. G. I. of Philadelphia sell their spent oxide?

A. I do not; it is very likely they have a small market and do dispose of some small quantity, but we are unable to do so in New York. Local conditions many times govern those things.

Q. What candle power is your coal gas before it is enriched?

A. It varies from 12 to 16, rarely above 16.

149 Q. And that is enriched by you up to the legal requirement in what manner?

A. Either by the introduction of gas made from oil or by mixture with a high candle power water gas.

Q. Well a mixture of the high-candle-power water-gas is the more economical of the two, isn't it?

A. No.

Q. What?

A. I don't know that there is any particular difference, any special difference in the absolute cost of enriching.

Q. What do you do at your 14th Street works, how do you enrich the gas there?

A. We produce coal-gas there without any enricher. We manufacture oil-gas at the 21st Street station and send it down there to be mixed in the holders. We also send water-gas down there.

By Mr. MATTHEWSON:

Q. When you say "send it down there" you mean 14th Street?

A. To the 14th Street station, and the 14th Street station sends a portion of their gas away to be mixed at other stations.

By Mr. PAGE:

Q. How many candles per gallon of oil do you figure that you get?

A. The oil that we are producing now, we should get about five candles.

Q. That would give five candle-power to how many cubic feet of gas?

A. That is an abstruse calculation. It would give five candle-power to probably—well, I couldn't get it into figures. Five candle-power to a mixture of the oil gas and about 60 per cent. of coal gas, that is to say 60 per cent. of coal gas and 40 per cent. of the oil gas in volume, if we get that mass out of it. That is an awful calculation to make without the figures.

150 Q. That isn't the usual way of figuring it?

A. No, sir.

Q. Could you state how much oil is necessary to use to raise a 16 candle-power of coal gas to 22 candle-power per thousand cubic feet?

A. I would not like to try and state that offhand.

Q. There is some way, I suppose, of arriving at the cost of the enrichment per candle-power, isn't there?

A. Yes; it takes more oil to bring the candle-power of gas up from 20 to 22 than it does to bring it from 16 to 18.

Q. What grade of oil—you said the grade of oil now used was five candles per gallon?

A. We are using now what is known as gas oil of a specific gravity; that is the only way I can describe it—of from 28 to 29 Baumé Hydrometer.

Q. Now you may describe the method of manufacturing water gas.

A. First is the coke, that is similar to what I described yesterday for the coal gas; it is brought to us in barges, unloaded from the barges, conveyed to the works, to the coal storage sheds or to the works direct as the case may be.

Q. Is that coal or coke?

A. Coal. We make water gas almost entirely by coal. Did I say coke?

Q. Yes.

A. Just make it coal. It is anthracite coal. In the generating house, so-called, are what is known as water-gas generating sets. They comprise three—each generating set comprises four pieces of apparatus, the first is known as the generator, the second is known as the carburetor, the third is the super heater and the fourth is known as the wash box or seal box. The generator is filled with coal to a proper suitable depth, usually full, an air blast is introduced into the bottom and the coal heated up to a state of incandescence, white hot. When it arrives at that point the air blast is shut off, the air blast is obtained from blowers and engines in the engine room, the

151 blast shut off and the steam is turned into the generator and made to pass through the coal, through this incandescent white hot coal. In passing through the coal the steam becomes decomposed and the resultant gas, with perfect theoretical perfection, would be fifty per cent. hydrogen and fifty per cent. of carbonic oxide. I might say that the first result of the introduction of the steam is the formation of hydrogen and carbonic acid. This carbonic acid in further progress through the incandescent coal takes up another atom of carbon and becomes carbonic oxide. The carburetor is composed of round cylinders lined with firebrick and in the interior of the lining is put up a mass of checkered brickwork, that

is brick piled on each other, leaving interstices between. The water gas so-called passes into this carburetor and is there met with a jet of oil. They pass along together and the oil becomes decomposed, cracked up, and turned into gas in the presence of the water gas that it is carrying through. It passes then through the super heater, which is of the same general construction, and is there further mixed and from there into the seal or wash box and from there to what is called the relief holder. That is a gas holder, usually small, that is placed in the line to act as a governor to take up unequal periods of production. In case the gas is being produced in the generating plant faster than being taken care of through the remainder of the plant it fills the holder; if the remainder of the plant is working faster than the generator it is taken from the holder; it is simply a cushion or governor holder. From there it is taken by the exhausters and passed through the condensers, washers, to the shaving scrubbers, the purifiers and station meters to the holder.

Q. The process after it leaves the seal box is very much the same as in coal gas?

A. It is very similar. We have what is known as shaving
152 scrubbers in the water gas works that have never to my knowledge been used in the coal gas process; they are an evolution of water gas manufacture.

Q. The carbureted water gas before the adding of the oil has no illuminating power, has it?

A. It is not carbureted water gas before the addition of the oil, the oil makes it carbureted.

Q. Yes, that is a misnomer. And the oil is added to give the illuminants?

A. To give the illuminating properties.

Q. How much oil do you use to enrich 1,000 feet of gas?

A. Between four and five gallons, varying constantly from day to day.

Q. Do you use the same oil that you use for the oil gas to enrich coal gas?

A. The same.

Q. That is a gas of lower candle power and requires the use of more gallons of oil per thousand cubic feet than that which was formerly used, isn't it?

A. Slightly more; there is not a great difference.

Q. It is stated by Newbigging that there are seven candles per gallon of oil and it is necessary to use 3.43 gallons to enrich carbureted water gas to 24 candles; that would be a higher grade of oil than you use?

A. Yes, sir.

Mr. MATTHEWSON: It would also be English gallons which are larger than our gallons.

The WITNESS: The English gallon is substantially larger than the American; it is 231 cubic inches in the American gallon and 270 in the English, you will find it in that book.

By Mr. MATTHEWSON:

Q. The English are substantially larger?

A. They are much larger.

153 By Mr. PAGE:

Q. Do you know whether in the use of oil in England that they use the English gallon or the American gallon as the standard?

A. I can't give that.

Mr. MATTHEWSON: The question is rather Newbigging uses it, isn't it, Senator? He uses the English gallon, I am very sure.

The WITNESS: The English gallon weighs ten pounds and ours weighs eight.

Q. What by-products do you recover from the manufacture of water-gas?

A. Water-gas tar. There is no ammonia and no coke.

Q. The amount of sulphur produced is higher, isn't it, in the water gas than it is in the coal gas?

A. Dependent on the class of coal, some coal produces more sulphur than others; that is entirely dependent on the coal used.

Q. But that is something that you do not recover in any way?

A. No, sir, I have never been able to find anybody who would recover it from the water gas mass. As I said, some years ago we sold mass from the coal gas and the water gas and it was expressly stipulated we should give them no more water gas mass because it was of no value.

Q. How many thousand cubic feet of carbureted water gas do you produce with the use of a ton of anthracite coal? Or, if you are in the habit of stating it in any other way, state it that way.

A. The production is about forty pounds to the thousand feet, forty pounds of coal, that is the way we always figure it.

By Mr. MATTHEWSON:

154 Q. Does that include coal used both in the generators and under the boilers?

A. No, that is about forty-five including the boilers.

By Mr. GANS:

Q. That includes the coal used under the boilers?

A. Under the boilers.

By Mr. PAGE:

Q. The coal you use under the boilers is largely screenings and coke breeze, isn't it?

A. No, sir, we use good coal under the boilers and in a great many cases we use tar; we are obliged to because we cannot get rid of it—water gas tar.

Q. The initial cost of production of coal gas is greater than water gas, isn't it, but is reduced by the greater amount of by-products that you sell?

A. Yes.

Q. In Astoria, the unit you have built over there, being two plants, are both coal gas plants, are they not?

A. Entirely.

Q. Do you contemplate building there also a water gas plant in some of the units?

A. It has been considered. I don't know that I may say it is contemplated. I have canvassed that idea in my mind and also talked with our officials about it.

Q. What amount of oil tar do you get, or whatever the standard is I don't know——

A. One thousand cubic feet of gas would be—I am sorry you ask me all these questions without giving me a chance to get something to answer them with. I have so many other things in my head besides that. It is about a gallon, approximately.

Q. From what?

A. It is about ten per cent. of the oil used, that is as near as I can tell you.

Q. You are chief engineer of the company, are you not?

A. I am.

155 Q. And the production of gas is in your department, and under your supervision?

A. It is.

Q. You have been engaged in the production of gas for how many years?

A. Between 35 and 40.

Q. Do you supervise the purchase of materials that go to the production of gas?

A. I do not.

Q. It is only that which goes to the production of plants that you supervise?

A. Yes. I make requisitions for so many hundred thousand tons of coal, or something of that kind, but it is purchased by the purchasing department.

Q. But the payrolls for the help and other expenses, that go into the production of gas, is that under your charge?

A. Not directly. The payrolls at the station are made out at the station by the superintendent in charge; they are sent down to the general office and into the finance department, and unless there is something making it necessary for me to pay attention or look at it, I do not look at it; and if there is something that they wish to call to my attention, they do so.

Q. You say that you have data at your office that would show the accurate answers to these questions, to which you have given answers approximately?

A. Yes, sir, I think so.

By Mr. BURR:

Q. You have nothing to do with the financial department of the Consolidated Gas Company?

A. No, I should say, no, sir.

Q. Your sole business is looking after the plants and holders?

A. The holders and plants, yes.

Q. You might state for the benefit of the Court and Counsel, just what your duties are, Mr. Bradley.

A. They are to exercise the general supervision over the entire manufacturing plant of the company; to see that the gas is made

or produced in proper quantity and quality; to have a gen-
156 eral supervision also over the main laying and to deliver the gas up to the consumers' meters. After the gas arrives at the consumers, I have no further concern over it.

Q. Can you state the elements that go to make up the cost of manufacture of coal gas?

A. Only in the most general way.

Q. Will you state it in that way?

A. If I want to make a comparison between stations, which is the only reason that I have for making up the cost, I have no possible reason otherwise, I simply take the elements which I wish to compare which may be labor, may be coal, may be water, and put them together and compare them; it may be repairs.

Q. So that the elements you say, would differ at the various stations?

A. Would differ at the various stations, and differ entirely from the ultimate wind-up of the account.

Q. You appeared before the Gas Commission and gave your testimony on behalf of the Consolidated Gas Company, didn't you?

A. I did.

Q. And you also appeared before the Stevens so-called Investigating Committee?

A. I did.

Q. And you have appeared on a number of occasions as representative of the Consolidated Gas Company to give testimony as to the values of its various plants and properties?

A. I have; yes, on two occasions.

Q. Do you recall them specifically?

A. Two is all that I recall just now. One was in the case of the Harlem condemnation proceedings, whether or not it is the proper name I don't know, the Little Italy Park, the other was the 18th Street station that is now abandoned.

Q. A large element in the manufacture if not the largest element in the manufacture of coal gas is the coal, is it not?

A. That is the chief item.

157 Q. That even exceeds labor?

A. Oh, yes.

Q. Here in this territory you receive your coal at tidewater, don't you?

A. We do, yes, sir.

Q. Which is the most favorable condition under which you could receive it?

A. Most favorable condition under which we could receive it here, yes.

Q. Yes, I am speaking of here?

A. Yes.

Q. You have been a gas engineer for over twenty-five years?

A. Yes, sir.

Q. And you have seen the growth of this city and the increase of the consumption of gas during that time?

A. I have.

Q. Would you not say now as the result of your experience and

observation that this is the most favorable territory in the United States for the production of gas and realizing a profit thereon?

Mr. MATTHEWSON: I object to that as entirely too general a question and irrelevant.

Mr. BURR: If he does not know, he may say so, but with the experience that he has had, I think he may give us the result of that here.

The MASTER: I will allow it.

A. There are many places in the United States where gas may be produced very much cheaper than in New York.

Q. Has the growth of population anything to do with the favorable and profitable sale of gas?

A. The growth of population if it is concentrated, closely concentrated, has an influence on distribution, not on manufacture.

Q. Do you mean then that there is more distributed than manufactured?

A. No, sir, I mean that it costs less to distribute a given quantity of gas through a small main mileage system than it does to distribute the same quantity of gas through a very large main mileage.

158 Q. Take the lower end of New York here where we sit, for instance, is there any more crowded territory to your knowledge than exists right here?

A. No, sir.

Q. And is not the distribution of gas in this territory here in the lower end of New York most favorable and profitable?

A. It is generally supposed so. I think not.

Q. Will you give us your reasons for thinking that it is not?

A. Because the growth of the gas consumption in this lower part of the city is *nil*. In fact some two years past it has showed a decrease.

Q. To what is that due?

A. Electricity.

Q. Is that due to the fact that electricity can be obtained cheaper than gas?

A. The people like electricity better than gas. I doubt very much whether electricity in dollars and cents, light for light can be supplied as cheaply as gas, but there are a great many buildings, and I think this is one of them, which are built without any reference to gas, where they could not use gas if they wanted to.

Q. Has your business in the lower part of the City of New York increased during the years 1903, 1904, 1905?

A. In one of those years my impression is it showed an actual decrease; I am not positive of that unless I have reference to the accounts, but that there was one year that showed a decrease I am positive.

Q. You have ten plants, have you not, in the City of New York?

A. The Consolidated Gas Company has five working plants?

Q. Will you name them again, Mr. Bradley, please?

A. The 14th Street—I am simply giving you the location, without describing it particularly——

Q. Yes.

A. 14th Street and East River, 21st Street, East River,
159 99th Street and East River, 44th Street, North River, 42nd Street, North River.

Q. And the other stations, 18th Street, 63rd Street, 65th Street and 11th Street, 132nd Street, and Innwood, are operated by whom?

A. 18th Street is not operated at all; I eliminated that. I am talking about going works. 65th Street station is not a manufacturing plant, simply a holder, or distributing station; 63rd Street is of the same character; Innwood is of the same character; 132nd Street is of the same character; simply outlying holders, where the gas is sent from the station and distributed there. Those are not classed as manufacturing stations.

Q. So that the property of the company consists of the plants and these holders?

A. Yes.

Q. That property is used in the business of the company?

A. Exactly.

Q. Outside of the main offices?

A. Yes. In addition there are shops that I have not under my direct control. I am simply speaking of what I am controlling.

Q. I am now thinking of property that is actually used in the manufacture of the gas. Of course there are shops and stables and storage yards for coal, &c.?

A. These stations I have enumerated are where the gas is actually manufactured. The shops are in many cases adjuncts to those stations where work is done.

Q. Since 1884, when you became engineer for the Consolidated, how many new plants or holders have been erected by the Consolidated?

A. There have been no new plants, *per se*.

Q. And isn't there a plant or holder——

A. When I say plant, I intend to convey the idea of manufacturing plant. A holder is a holder, and while it is part
160 of a plant, still its usual designation is plant and holder. The holders that have been erected——

Mr. MATTHEWSON: What is the question, how many holders have been erected since 1884?

Mr. BURR: Yes.

The WITNESS: Shall I call them off separately, or say so many?

Q. Yes, designate them.

A. One at 14th Street station. Shall I state the capacity?

Q. Yes.

A. 3,200,000 cubic feet capacity. One was erected at the 18th Street station of the same capacity, and has since been taken by the city and is no longer in existence, but it was erected during my connection with the company. At 63d Street one of 3,000,000 cubic feet capacity; at 65th Street, two of four million cubic feet capacity each; at 111th Street two of five million cubic feet capacity

each; at 132d Street one of five million cubic feet capacity. That I think comprises the list.

Mr. MATTHEWSON: How about Inwood and 21st Street? Were they put up since 1884?

The WITNESS: Inwood was erected. A small one at Inwood.

Q. What is the capacity there?

A. 60,000 feet.

Q. What is the life of a holder, from your experience?

A. I have no information as to the life of a holder. There are holders in New York older than I am, still working in good shape.

Q. There are also mains?

A. Yes.

Q. Now in your department I suppose you have a complete list of all the mains that are laid in the public streets of the city of New York?

A. In what might be called an annex to my department, yes; in what we call the street department.

161 Q. Well, it is a branch of your department, is it not?

A. Yes, sir.

Q. Because necessarily you must know where the mains are?

A. I know from the maps and books and data, but I cannot say what main there is here in Wall Street, for instance.

Q. No, I do not understand that you can.

A. No.

Q. But you have books and maps and data, from which that can be done?

A. Yes, sir, which are complete as it is possible to make them.

Q. Has the size of mains anything to do with the proper distribution of the gas in the streets?

A. Very much to do with it.

Q. So that a main which was put down years ago before present conditions existed, and is now being used, might not be able to carry on the business successfully, that it is now being used for?

A. If it was used exactly as it was within twenty-five years ago, yes.

Q. The capacity or the size of the mains has considerable to do with the pressure of the gas?

A. Yes.

Q. And the regulation of that pressure, has it not?

A. Yes.

Q. In this work which has been referred to I find a short statement with regard to that, Mr. Bradley, and I read it and ask you whether you approve of it or not.

Mr. MATTHEWSON: What work is that?

Mr. BURR: Mr. Newbigging.

Q. He says there can be no doubt that much of the success of the coal gas industry is due to the adoption of enlarged mains and service pipes as compared with the restricted sizes in use from twenty-five to thirty years ago, admitting as they do in the

162 reduction of the pressure with the consequent reduction of loss by leakage and increased illuminating value. Is that statement true from your experience?

A. In a general way, yes. I do not know why the illuminating value is brought into it. I cannot see any gain in illuminating value from passing through a large pipe.

Q. I notice you have a smile on your countenance, and Mr. Addicks has, but this is from Mr. Newbigging, who I understand is a very competent engineer.

A. He is a very competent man, but Mr. Newbigging, like all of us, says some things which are not so.

Q. Does that apply to yourself?

A. I suppose I have made statements at times which are not so.

Q. Do you remember testifying with regard to the 14th and 18th Street works in an effort to have the taxes wiped out on the ground that they had no market value?

A. I don't recall testifying on the tax question at all, sir.

Q. In each one of those stations that you have referred to there is a man in control under your supervision?

A. A superintendent, yes, sir.

Q. And in that station there is a record made and maintained of the amount of coal and oil that may be used year by year?

A. Day by day.

Q. Would you be good enough to give me the names of the men in charge of the stations to which you have just referred?

A. At the 14th Street station the superintendent in charge is named Albert Riblet; at the 21st Street station the superintendent in charge is Charles Keegan; at the 99th Street the superintendent in charge is Mr. Frederick Bradley, my brother; at the 44th Street station the superintendent in charge is William Hawthorne; at the 42d Street station is Mr. Frederick Down. Mr. Down also has charge of the 65th Street and 63d Street holder stations, not manufacturing stations, but holder stations.

163 Q. Yes, I understand, and who are the other men who have charge of the holder stations?

A. Mr. Bradley at 99th Street has charge of the 111th Street holder station; at 132d Street, that is only a new holder just put into use, and it is in, I might say, my direct charge just now for the time being, until the superintendent is designated who shall look after it. Inwood is in charge of Mr. Rowland, I think it is Charles.

Q. I understood you to say that as fast as you possibly could you were putting down eight-inch mains in the street?

A. Eight-inch mains were the smallest we were putting down. We are putting down large mains in quantities, but eight inches was the smallest, was my statement.

Q. Well, how large are they, how large are they above eight inches, twelve inches?

A. Oh, as high as 36.

Q. And do you wish to be understood as saying that the pressure fixed by the law could not be carried out by proper mains placed in the street?

A. I do.

Q. Do you make tests for specific gravity every day?

A. Tests are made for specific gravity. I do not make them per-

sonally, but they are made and I see them occasionally, when I have occasion to see them.

Q. Who makes those tests?

A. They are made by the works superintendent, and by the chemist.

Q. Is a record kept of them?

A. A record is kept, yes.

Q. Where is that record kept?

A. At the stations, I think, and also sent down to the Irving Place office.

Q. When a new holder is to be built, is it built on your own initiative or in recommendation?

A. Yes, sir.

164 Q. Has that been the practice heretofore.

A. Yes.

Q. And you have at present and have had for a number of years ten distinct holders and plants, five plants and five holders or five plants and six holders?

A. Yes, that is correct.

Q. A more economical way is to have the plants and holders all together, isn't it?

A. More economical in one way and more wasteful in another.

Q. In what way is it more economical?

A. More economical because the more holders are grouped together, the less number of superintendents and the less number of men are required to look after them.

Q. In what way is it more wasteful?

A. Because in grouping the holders together where you are supplying long distances like in New York, it would very much increase the cost of distribution system of mains.

Q. Does that apply to the proposed construction in Astoria?

A. No, sir.

Q. Why not?

A. Because we propose to retain the holders where they are in New York, and also build others when the time comes.

Q. Then I understand you to say that the Astoria plant is not meant to supplant the properties, the holders and plants in the Borough of Manhattan, but is to be in addition?

A. I have never said in any possible way, in any testimony, or in any conversation, that the gas holders would be dispensed with; on the contrary I have always said that they would remain and that others would be built.

Q. So that necessarily the proposed construction in Astoria is to take care of the contemplated increase in business?

A. It is in addition to the present plant.

Mr. GANS: I think we will have to move to strike out that answer as not responsive.

Mr. MATTHEWSON: Do you think a motion lies to you?

165 Rather to the examining counsel, I should say.

Mr. GANS: I think we have certain rights.

Mr. MATTHEWSON: Yes, certain rights.

Mr. GANS: We would have a right to object to the question, and I think we have the same right to move to strike out the answer as not responsive.

The WITNESS: It was an exact answer as I understood it.

(Question and answer read.)

The MASTER: I will let it stand.

Mr. GANS: Exception.

Q. And the present plants in the city of New York are to remain just as they are and to be maintained?

A. They will remain, and undoubtedly must remain until we can produce in Astoria sufficient manufacturing capacity to replace them.

Q. Will that be when the Astoria plant is in operation?

A. Not when this Astoria plant is in operation, not when the first plant is in operation, no sir.

Q. Then to all intents and purposes, for first consideration, the Astoria plant is to be maintained in addition to the plant already here and now existing?

A. I do not see how we can do anything else, sir.

Q. You have charge also of the city lighting, of the city lamps, Mr. Bradley?

A. No, sir.

Q. Is that in another department?

A. That is in another department entirely. I have no connection with that.

Q. You do not know of your own knowledge, the amount of gas which the city consumes per annum?

A. Not of my own knowledge; I have never looked it up.

166 Q. And the same applies with those items that you gave us as to maintenance and repairs, does it not? You have no knowledge yourself of the payments of these amounts?

A. I did not see the checks passed for the amounts, no, sir.

Q. Will you be good enough to tell us how these bills are incurred? Do you take the initiative in that respect also?

A. I do.

Q. Then you make a requisition upon the main office?

A. I will state it in a few words, if you please.

Q. Yes.

A. The superintendents of the stations are called upon by me every year to make recommendations as to what they require in the way of repairs, additions or improvements. I take those recommendations, go over them and decide as to their practicability or necessity and report to the Directors or Executive Committee that I want an appropriation of so much money for each station; whatever the sum may be. If that is passed and agreed to by the Executive Committee I then go on, through my assistant engineering staff and make the plans and see that the apparatus is ordered and contracted for and put into operation.

Q. Well, therefore you must keep a record of all these matters for your own protection, don't you?

A. I—yes, I have a record, but it is not an absolutely complete record.

Q. Is it not as complete as the record that is in the main office?

A. No, sir, because everything is rounded up into the main office. There are often times expenses that are incurred foreign to my department that are brought in necessarily, and they are collated and brought together in the main office, to which I have access at any time if I want to find out anything, so I have no reason for burdening myself or my staff with accounts which are unnecessary.

167 Q. I understood you to say in reply to a question by Senator Page that the papers which you produced here from which you testified were statements given to you by someone as extracts from the books containing this information of which you are now speaking?

A. Exactly.

Q. They are not original entry by any means?

A. This paper that I produced here was not an original entry. It was taken from the book.

Q. Do you know who has charge of these books?

A. Mr. Carter, I think, is the head of the department. It is to him that I apply if I want any information, and he sets his clerks to work to furnish it to me.

Q. Do you figure out for the year the number of tons of coal that will be required in the same way and make a requisition upon the main office?

A. I do.

Q. Do you attend to the making of a contract for the delivery of that coal?

A. I do not.

Q. The variation of ten cents in the price of a ton of coal would affect to a degree each thousand feet of gas, would it not?

A. Yes, sir.

Q. And that also applies to oil, doesn't it?

A. Exactly the same.

Q. The variation of a cent in a gallon, or half a cent, or quarter of a cent, or an eighth of a cent, in a gallon of oil, would affect the cost of the production of a thousand feet of gas?

A. It makes the material dearer.

Q. Therefore the gas engineer would seek to buy his commodity as cheaply as possible?

A. Exactly; yes, sir.

Q. And if open competition would result in getting the most favorable prices, it would be his business to seek open competition, would it not?

A. It would.

168 Q. Do you know what the method is that is pursued by your company?

A. I do not.

Q. Now, after the gas is made, you have stated there are residuals. Do you have charge of the disposal of those residuals?

A. Not except to deliver them under the contract.

Q. You do not make any bargain as to the price to be paid for them?

A. I make no bargain, absolutely. The bargain is made by the financial officers of the company.

Q. Did you read the affidavit which was submitted by the city on the motion made for an injunction in this case, the affidavit of Dr. Marks, containing the record of the test made by Dr. Love and himself in the Syndicate Building, otherwise known as the Park Row Building?

A. I did not.

Q. To ascertain the pressure?

A. No, sir; I saw the doctor's affidavit, but I never read it in its entirety. I simply skimmed over it.

Q. You have made a very careful study of this subject of the pressure?

A. I have.

Q. And you did not read that statement of Dr. Marks, with regard to this matter of pressure?

A. I did not; in fact, I do not think I was ever in possession of the affidavit more than to take it up and look it over and lay it down again; I was never furnished with a copy of it.

Mr. BURR: We also join in the demand of counsel for the complainant to produce the books of original entry here, so that we may have an opportunity to fully cross-examine this witness with regard to these various matters to which reference has been made, and as to which he has testified that his sole source of information was these extracts furnished to him from the books of original entry.

I also apply and make a demand upon them for the pro-
169 duction of the contract for the supply of coal during the years 1903, 1904 and 1905, and the contract for the supply of oil during the same years.

Q. I understood you to say that you contemplated in the future constructing water plants in Astoria.

A. No, sir; you misunderstood me. I do not think I said that. I said that I had had the matter under advisement, under contemplation, but had not decided as to the practicability or feasibility of it; that is what I intended to be understood as saying.

Q. This unit which is now far advanced is to be used in the manufacture of coal gas solely?

A. Coal gas entirely.

Q. What are the merits or demerits of water gas as compared with oil gas and coal gas?

A. In what respect?

Q. In any respect.

A. I do not know that I know how to answer that—merits or demerits; they are both gases, and both used for illumination, both singly and mixed together.

Q. I am trying to arrive at an explanation from you as to why any other kind of gas is manufactured than coal gas?

A. Oh; the manufacture of water gas was started in 1876 and

1877, at the Municipal works, where I was in charge; that was the first water gas manufacturing plant in the country of any size. It was then manufactured or then adopted, because it was claimed, and properly at the time, that gas of a higher illuminating power could be made at a less cost than coal gas. That went on for a term of years, for some years, and proved to be the correct theory. Then the coal gas advocates and manufacturers woke up, I might say, and began to make improvements and pay more attention, perhaps I might say, to the manufacture of coal gas, as it was an active
170 competition then with water gas which they feared. That being the case, the manufacture of water gas was gradually extended and adopted, and prices began to go up. When we first made water gas we used naptha as an enricher. That finally got to a price where we could not afford to use it any more, and we finally went to gas oil. Then gas oil became hard to get and scarce, that is, the grade of gas oil. Then we went down to even a lower grade, which we are using now; so that as to the relative difference between the cost of manufacturing water gas and coal gas, not to include, perhaps, the candlepower, the result is that the cost to manufacture has gradually drawn together nearer to the same point.

Q. Does that also apply to oil gas?

A. Yes, oil gas is under the same general category as water gas; they are made in conjunction and connection, and one is practically a part of the other.

By Mr. MATTHEWSON:

Q. You make no oil gas except for the purpose of enriching your coal gas?

A. We make no oil gas except for the purpose of enriching our coal gas.

By Mr. BURR:

Q. There is no difference then in the price or cost of manufacture in these cases? One cannot be manufactured cheaper than the other?

A. Water gas can still be made a little cheaper than coal gas.

Q. How much cheaper?

A. I cannot state; I do not know. I know there is a difference, but, given a favorable market for coke, tar and ammonia under the best possible conditions, there will be but little difference in New York.

Q. Under prevailing conditions, I suppose the difference
171 could be ascertained from an examination of your books, could it not?

A. Undoubtedly.

Q. Now, as a gas engineer of so many years' standing, you would say that the successful and profitable manufacture and distribution of gas depends largely upon the skill and economy with which the business is carried on?

A. It has very much to do with it.

Q. As with any other business?

A. As with any other business.

Q. And that unnecessary expenditures of money would necessarily enhance the cost of manufacture and distribution of gas.

Mr. MATTHEWSON: That would almost go without saying.

Mr. BURR: I thought it might be a little different theory in the gas business.

Mr. MATTHEWSON: No, I think not; we are not paying high prices for articles that we do not have to, for the purpose of reducing our own profits.

Q. Have you a map in your engineering department showing the dimensions of these various plants and the holders?

A. We have drawings and maps of all the various stations; not on any one map.

Q. But you have a series of maps showing that completely and in detail?

A. Yes.

Q. And not only that, but you must necessarily have an inventory of each piece of property in connection with each plant and holder?

A. Every piece of land?

Q. Of machinery?

A. No, not necessarily; we have drawings that show all this various machinery, but I do not know that I have in any case a complete inventory of it.

172 Q. How could you make up the value of any given plant unless you had an inventory of all that went to compose it?

Mr. MATTHEWSON: I object to this. The witness has not testified to the value of any plant. This is not cross-examination, and counsel will be making the witness his own, if it were allowed.

Mr. BURR: I am asking if such an inventory is in existence.

Mr. MATTHEWSON: He says no.

Mr. BURR: Is that your answer?

The WITNESS: I said no.

Q. Then I understand you to say that the Consolidated Gas Company has no inventory of the property going to make up its plant in the Borough of Manhattan and the City of New York?

A. As far as my knowledge goes it has none; if the financial department has one I have never seen it.

Q. Haven't you made an affidavit in this very proceeding stating that to your knowledge the value of the plants and property of the Consolidated Gas Compa y was such and such a figure?

A. I did.

Q. Can you tell me the source from which you derived the knowledge upon which you based that statement?

A. From my own knowledge, my own information in regard to the business, the requirements, and knowledge of the business.

Q. Did you make that statement without having any inventory before you, or without making any examination of this property that I refer to?

A. Without making any special examination for the purpose.

Q. Is that the rule of gas engineers in making the estimated value of gas property?

172 A. It is the rule for making approximate estimates, adopted by many engineers, myself included.

Q. Then, a man would be able to give an opinion in regard to the value of property without knowing anything about it practically?

A. No, he must know about it.

Q. If he must know about it he must have an inspection of it, must he not?

A. It must perhaps be understood that the works, having been under my charge for twenty years, I have made various inspections of them from time to time during that twenty years.

Q. What I am getting at is: It was from such inspection that you based your opinion that the property was of that value, as stated by you?

A. It was from such inspection and my knowledge of the producing capacity and operation of the plant.

Q. No other engineer could give a sensible and fair estimate of the value of that property without having a similar inspection, could he?

A. No, sir.

Q. And it would be necessary for him to have an inventory of all the property used at these various plants?

A. In making a valuation of any other character it would be necessary to inspect and inventory the value of each separate piece of apparatus.

Q. Of any other character but gas property.

A. Of any other character but the valuation that I gave. In making a valuation of any other kind, I intended to say.

Q. By any other engineer, you mean to say?

A. Yes.

Q. It would be necessary to what?

A. To make a thorough inspection and arrive at his own conclusions by his inspection and by his inventory and measurements and calculations.

Q. Are you familiar with the process and practice adopted

174 by the gas companies of Massachusetts in that regard, in making their annual reports?

A. Only generally familiar, from what I have seen in looking over their reports.

Q. You have also stated, if I remember rightly, in this proceeding, that the plants and holders of this company are now in the best possible physical condition?

A. I believe them to be so, yes.

Q. And that gas is manufactured and distributed under the most favorable conditions in the city of New York?

A. So I believe.

Q. And notwithstanding that I understand you to say that the Consolidated Gas Company had invested some nine millions of dollars in this company in Astoria already?

A. Yes, it is necessary to invest it here or th re.

Q. Why not here?

A. Because it is more expensive to manufacture gas in New York, on account of the fixed charges and the troubles and difficulties with the Board of Health and the Building Department, and with the city bureaus.

Q. You think that when you get over to Astoria you will be free from the observation of those departments?

A. I do not think that we will be free from observation, but we will probably be free from a good many of the annoyances, which are real annoyances now, but they will not be noticed over there.

Q. What reason have you for making that statement?

A. If for instance we take a gas plant in a crowded residential locality, surrounded entirely by dwelling houses, and there is a little smoke or a little smell or a little noise emanates from the gas works, the Board of Health are after us at once. Over there we are in open country, out of the way, with nobody to bother and nobody to annoy.

Q. Then this belief that has been cherished by so many, that the places occupied by your holders were to be turned into public
175 parks, is a myth? It does not exist in actuality?

A. Any one who had that idea about the holders was very badly mistaken.

Q. Of course the stock has been issued for this investment in Astoria, by the Astoria Light, Heat & Power Company?

A. That I cannot answer, sir, that I do not know.

Q. You do not know about that?

A. No, sir.

Q. I understood you to say a moment ago that you took the initiative about the construction of the plant in Astoria.

A. Certainly; that is, as far as the engineering part of it went; I made no initiative as to stocks, bonds and payments.

Q. But as a practical proposition, and as a proposition for the construction of a great plant, possibly the largest in the United States, you took the initiative in suggesting that and devising the ways and means for its construction, did you not?

A. From an engineering standpoint, yes, not from a financial standpoint.

Q. Did you make a report to the officers of your company upon the advisability of the construction of that plant at Astoria?

A. I did.

Q. You recall the date of that report?

A. No, not the special report. I have recommended consistently, in, I think, every annual report I have made since 1876, that we should take measures to move out of the city, but as far as a general absolute recommendation is concerned, I do not know that I recall it now; I have done so much in connection with it.

Q. You were here yesterday when Mr. Francklyn testified?

A. I was.

Q. You heard him testify as to the extent of the vacant and unused property owned by the Consolidated Gas Company in the City of New York?

A. I did.

176 Q. In the Borough of Manhattan?
A. Yes.
Q. Did it occur to you that that vacant and unoccupied and unused land could be used to the advantage of the company in extending its plants and holders?
A. No, sir.
Q. When was the report that you finally made in regard to the Astoria proposition acted upon?
A. I cannot say that sir; that was an action by the Board of Directors or the Executive Committee; that I do not remember, if I ever knew.
Q. Can you not recall the year?
A. It must have been four or five years ago.
Q. When were the works first started in Astoria?
A. About that time; that I cannot say without referring to data.
Q. Are the holders and plants to which you have testified just now in the same condition, practically, as they were when you testified before the Stevens Committee?
A. Before the Stevens Committee—that was a year and a half ago. Oh, we have made additions and repairs constantly since, and are building holders.
Q. They were in good physical condition at that time, were they not?
A. They were.
Q. And they are in good physical condition today?
A. They are.
Q. Would you say that they were in better physical condition to-day than they were three years ago?
A. I think so.
Q. Now, when you get the authority to make repairs, do you go out and make a contract for the repairs?
A. I do not.
Q. Are these holders, which you have referred to as having been constructed since 1884, constructed under your direct management by the company itself, or are contracts let out for the construction to different firms?
177 A. All of the holders are constructed by contract; the company cannot undertake that work of constructing holders.
Q. These contracts I presume are let at public bidding?
A. Not let at public bidding; competitive bidding.
Q. Does that also apply to repairs?
A. In some cases, where repairs are of sufficient magnitude to warrant it.
Q. To repairs, I presume, of over $1,000?
A. $1,000 or $2,000, as in my judgment are right and proper.
Q. These contracts are in writing are they?
A. The contracts with outside builders or manufacturers are in writing.
Q. Who has charge of those contracts?
A. Those contracts are in the financial department, under Mr. Carter's jurisdiction, I think.
Q. I presume the holder which is now being constructed, or has

been practically constructed at 111th Street, is the largest holder in the city?

A. 132d Street, don't you mean?

Q. I mean the one at Grant's Tomb.

A. That is 132d Street. The 111th Street holder was constructed some three years ago. That is only one of three or four of the same size.

Q. Was that built by a private firm?

A. That was built by the firm of Bartlett, Hayward & Company, of Baltimore.

Q. I think in previous examinations you have made up from your records a statement of the output for the past five years from each of the stations you have referred to. Will you supply us with a statement of that kind?

A. I do not remember that. I do not recall that. (To Mr. Matthewson.) What does he refer to?

Mr. MATTHEWSON: I do not remember that. You mean the output for what?

178 Mr. BURR: The gas that is produced by each plant.

The WITNESS: I did not produce it here; did I?

Mr. BURR: No; but I say you have heretofore produced it in some other hearing, have you not?

The WITNESS: I do not recall it now. It may be.

Mr. MATTHEWSON: I think you are mistaken.

Q. Can you produce it?

A. The output for the last five years, from all the manufacturing stations? I do not recall that I have produced it. If I did I have forgotten it.

Q. And a statement showing the amount of coal and oil that has been consumed during the same period?

A. Yes, that can be produced.

Q. And a statement showing the residuals that have been sold and disposed of during the same period?

A. Yes, that can be produced, but not absolutely from my records. I should have to go to the financial department to get it.

Q. A large item of expense that enters into the cost of mannufacture and distribution of gas is the question of meters, is it not?

A. Yes.

Q. Could you say off-hand about how much the company has had to expend on meters up to the present time?

A. No, sir; I know absolutely nothing about the meter department.

Q. But you know it does constitute a large item of expense?

A. I know that there is a large amount of meters used, and cost a large amount of money, but as I said a few moments ago, when I produce the gas and put it into the meters, it is up to them; I am done with it.

179 Q. That is not necessary in supplying the city with gas?

A. The public buildings, yes.

Q. I am speaking of the public lighting, street lighting.

A. There are no meters on the street lamps, no, sir.

Mr. BURR: I have not heard as yet, Mr. Master, whether the other side intends to produce the statements which the witness testified, and may be had.

(Counsel for complainant makes no reply.)

Then I am to understand from Mr. Matthewson's silence that he refuses to produce statements which may be produced.

Q. You can get up a statement of all the items going to make up the total each year of these expenditures that you have testified to here as having been made with regard to each particular plant and holder?

A. I shall have to be guided entirely by counsel.

Q. But I say, you have the physical means, if advised by them, to make up such a statement?

A. I can have it made up for me by the financial department; I cannot make it myself.

Q. I want to ask you, Mr. Bradley; do you act as engineer for all the constituent companies of the Consolidated Gas Company?

Mr. MATTHEWSON: Just a minute. I object to that question on the ground that there is no evidence that there are any constituent companies, and I do not know what that term means as counsel employs it.

The MASTER: If Mr. Bradley does not know what that means, he will probably say so. I think he can answer it. I overrule the objection.

Exception taken by Mr. Matthewson.

180 A. There are several other companies in the City of New York, and on occasion I act as consulting engineer for them; when they want any advice they ask me, and when I think they need any advice I give it.

Q. Are you paid for your advice by them or by the Consolidated Gas Company?

A. By the Consolidated Gas Company.

Q. You were here when Mr. Francklyn produced the deeds of the various companies to the Consolidated Company of their property, were you not?

A. I was here when he produced the deeds; I do not know which particular ones you refer to.

Q. Exhibit No. 48, which has been offered in evidence here by the company, shows the various pieces of property conveyed by different companies to the Consolidated Gas Company?

A. Yes, sir.

Q. By the New York Gas Light Company, by the Manhattan Gas Light Company, the Metropolitan Gas Light Company, the Harlem Gas Light Company, the Municipal Gas Light Company and the Knickerbocker Gas Light Company?

A. Those are the six companies that formed the consolidation in 1884.

Q. Those are the companies for whom you act as engineer?

A. Yes. Well, I do not know that they are the companies for which I act as engineer; I do not know that there are any such companies any more.

Q. Well, that will take care of itself. Do you use any gas other than that manufactured by you? In other words, do you buy gas from other companies?

A. We buy gas from other companies on occasions.

Q. From what companies have you bought gas during the past five years?

A. We have bought some from the Mutual Company, we have bought some from the Standard Company, and we have
181 bought some from the East River Company, and whether we have bought gas from the Central Union Company or not I do not know; I am not clear on that; we may have or may not; but the other three I know we have bought from.

Q. Did you say you have bought from the New Amsterdam?

Mr. MATTHEWSON: You meant the New Amsterdam Company instead of the East River Company, did you not?

A. If I said the East River Company I meant the New Amsterdam.

Q. Have you an account showing the amount so bought by your company from the companies that you have named, each year since 1901?

A. I have not.

Q. That account is with the company, however?

A. It is with the company, I assume; in fact, I know it.

Q. And how is that gas that is so procured by your company delivered to your company?

A. Delivered into our holders or into our mains, as the case may be, as the requirements may be.

Q. Is there any particular point or place at which that gas is delivered to your holders?

A. No, it is delivered to any gas holder in the city, wherever it may be required.

Q. Take last year, for instance; do you know what holders received gas so bought by the Consolidated Gas Company?

A. I should say at a venture that all of them did.

Q. Can you give approximately the proportion of gas bought to the amount of gas manufactured by your company?

A. No, sir.

Q. Would you be able to say that it amounts to as much as one-half of the total gas sold and distributed by the Consolidated
182 Gas Company?

A. No, sir, I would not be able to make any guess at that, without going to the books.

Q. Do you mean to say that you are not entirely familiar with the actual amount of gas distributed last year?

A. Except by reference to the books, no, sir, it is impossible for me to carry all the details of this business in my head; I am not able to do it.

Q. Could you give us within a billion feet the amount of gas manufactured and distributed by your company last year?

A. About thirteen thousand million I think, but I do not know exactly.

Q. Can you say what proportion of that you manufactured?

A. No, sir, not without access to my books to find out; I do not wish to make statements here that will be brought up against me afterwards—that I said so and so.

Q. I appreciate that, but what I want to get at is; there is a book showing the amount of gas that is purchased by the Consolidated Gas Company?

A. Most undoubtedly.

Q. Is that book in your control or in the Cashier's Department?

A. It is not in my control; it is in the Financial Department, or the Cashier's Department or the Bookkeeping Department, whatever it may be.

Q. Is that the same kind of gas, which is manufactured by you, as the gas which is purchased?

A. It is all water gas, with the exception possibly, as I said, that if we bought any gas from the Central Union that was also a mixture of coal and water gas, but whether we did buy from the Central Union or not I am not clear.

Q. Water gas which you purchase you must place in holders that are used for water gas, or do you mix it with the coal gas?

A. Not necessarily, because we mix them all over the city; it is absolutely impossible for me or anybody to tell where the gas at a given point in New York City is manufactured, absolutely impossible for me or anybody else.

183 & 184

Q. But what amount is actually manufactured by your company is shown by your books?

A. Yes.

Q. And what amount is actually purchased by your company is also shown by your books?

A. Yes, the amount of gas manufactured can be very readily determined, and the amount purchased can be very readily determined, I assume, from the books of the company; but in the distribution, where gas from a given point goes to or where it is distributed, or where it is from, nobody can tell.

Q. Given a certain amount of gas sold and distributed by the Consolidated Gas Company last year, are you able, in response to the question of Senator Page, to say how many cubic feet of gas can be obtained from a ton of coal, if you do not know how much of that gas was manufactured by you and how much of it was bought?

A. I can tell how much gas comes from a ton of coal if I only make a million feet; it is not necessary to make thirteen thousand million to find that out.

Q. But the portion of gas that is bought by the Consolidated Gas Company cannot be affected by the expenses of the Consolidated Gas Company in the manufacture, can it, of its own gas?

A. The gas that is bought is made and delivered to us. There is a certain amount of expense attached to the distribution of that gas by us afterwards.

Q. But the expense of its manufacture is a matter that relates to the company from whom it is bought?

A. The plant that it comes from.

At 4:15 o'clock P. M., adjourned until to-morrow, Thursday, July 19th, 1906, at 11 o'clock A. M.

Last Exhibits:

Complainant's 69.
State A.

185 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, THURSDAY, *July* 19, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

186 WILLIAM H. BRADLEY—Cross-examination continued by Mr. BURR:

Q. You say that you have made a special study of the question of pressure?

A. Yes.

Q. Will you tell me what relation, if any, pressure has to the consumption of gas?

A. I assume that you refer to the quantity.

Q. Yes.

A. I cannot think now of any other relation than that.

Q. Well, let me clear your mind on the subject. The point is: I find in Thomas Newbigging's "Handbook for gas engineers and manufacturers," seventh edition, published in London in 1904, this statement:

"By doubling the amount of pressure, the consumption of gas is increased by about one-half."

Is that true from your experience?

A. That is generally accepted as being the fact. I do not know that I can say that I ever made any definite experiments to prove the fact, but it is generally accepted as being correct.

Q. Can you tell me how many miles of main you have in the City of New York?

A. The Consolidated Gas Company has between eight hundred and nine hundred miles, I think.

Mr. MATTHEWSON: We will have another witness who knows all about that, Mr. Burr, in detail.

Q. Do you attend to the laying of mains in the street?

A. In a general way. There is a general superintendent of mains who attends to the details. I confer with him and he confers with me on that subject.

Q. Do you notify the company when mains are needed,
187 extra mains?

A. The general superintendent usually, in fact always, comes to me with the statement that certain mains are needed or required in certain localities. I look the matter over and approve his recommendation.

Q. Well, do you make any special investigation to ascertain the character or kind of mains that are needed?

A. The investigation is made by the superintendent of mains before it comes to me, and I simply take his statement of what he has done and what is required; if I think it is incorrect I alter it, and if it is correct I do not.

Q. You have no experience as an expert regarding pressure other than with the mains laid down in the streets of the City of New York by the Consolidated Gas Company or its constituent companies?

Mr. MATTHEWSON: I would like to have Mr. Burr define what is meant by constituent companies?

Mr. BURR: I refer to the affidavit made by Mr. Bradley in which he says—his language—so that we may be clear about it.

Mr. MATTHEWSON: Very good.

Q. I call your attention to the affidavit made by you in this case presented before Mr. Justice Lacombe, verified by you on the 4th day of May, 1906, on page 35 of the printed affidavits and notice of motion in this case, in which this language is used by you:

"The manufacturing plants of several of the six constituent companies which formed the Consolidated Companies in 1884 were originally coal gas plants."

To what companies did you refer when you made that
188 statement?

A. To the companies which formed the consolidation, the consolidated companies, the companies which formed the Consolidated Gas Company.

Q. So that we may have no misunderstanding, will you be kind enough to name them?

A. Harlem, the Knickerbocker, the New York, the Metropolitan, the Manhattan and the Municipal.

Mr. BURR: Are those the constituent companies that you refer to, Mr. Matthewson?

Mr. MATTHEWSON: Are those the ones you refer to in your questions?

Mr. BURR: Yes, those are the ones I refer to.

Mr. MATTHEWSON: Very good. I merely raise the question, if the Master please, because on the formation of the Consolidated Gas Company in 1884, these six companies disappeared, and it has always

since been the Consolidated Gas Company. So, of course, Mr. Bradley has had nothing to do with the mains of the constituent companies, technically speaking, since that time. It is all the Consolidated Gas Company, of course; nor has he been employed by them, because they have been out of existence since that date.

Mr. BURR: Mr. Bradley's testimony was yesterday that he had worked for them and supervised their plants and looked after their affairs.

The MASTER: Did he not say at one point that he was not sure whether or not they were in legal existence still?

Mr. PAGE: Mr. Bradley was general engineer of the Municipal before the consolidation.

Mr. BURR: Yes, in 1884.

Mr. PAGE: And since that time he has been engineer of
189 the Consolidated Gas Company, and consulting engineer with the Standard and the New Amsterdam.

The WITNESS: That is what I referred to, the companies outside of the Consolidated, where I act as consulting engineer.

Mr. MATTHEWSON: The present companies?

The WITNESS: The present existing companies outside of the Consolidated.

Mr. MATTHEWSON: Mr. Bradley supposed that you meant by your question——

Mr. BURR: Suppose you let him state what he means.

Mr. MATTHEWSON: He has already stated it—the companies in which the Consolidated owns and holds certain stock, but not the six companies.

Q. These constituent companies which you referred to in your affidavit, to which I have called your attention, are the companies you have just named?

A. Are the companies which formed the present Consolidated Gas Company.

Q. And which you have just named?

A. Which I have just named. I will name the Standard, which I eliminated from those I just named. The six I have named, or the six referred to in that affidavit as constituent companies, were the constituent companies which formed the consolidation, and no others.

Q. And united together in 1884 by the Act of Consolidation and Incorporation of the Consolidated Gas Company; is that right?

A. That is correct.

Q. Now then, what other companies outside of those are
190 operating in the city of New York?

A. Now operating outside of the original six?

Q. Yes.

A. The Standard, the New Amsterdam and the Mutual, on Manhattan Island.

Q. And in the Bronx?

A. The Central Union in the Bronx, and the Northern Union in the Bronx.

Q. Do you act as consulting engineer for those companies?
A. I do.
Q. And you are employed by them, or are you employed by the Consolidated Gas Company to act as consulting engineer for them?
A. I am employed by the Consolidated Gas Company.
Q. Now, are these last named companies the companies from whom you purchase gas?
A. Some of them. I do not know as "purchase" is exactly right; they make gas for us. Yes, purchase. We pay for it. That makes it purchased.
Q. Take last year. I did not get this quite clear in my own mind, and you will pardon me if I repeat it a little. Can you say offhand how much gas was manufactured by the Consolidated Gas Company last year?
A. I stated yesterday, perhaps, if you remember right, that my mind was not quite clear as to absolute figures. It did not occur to me to refresh my memory on that subject, and it was my impression that it was about thirteen thousand million.
Mr. MATTHEWSON: Manufactured by the Consolidated Gas Company?
The WITNESS: No. I am wrong about that. I cannot answer that question.
Mr. MATTHEWSON: You said the Consolidated Gas Company sold about thirteen thousand million.
The WITNESS: Yes, sold about thirteen thousand million,
191 and that included the gas purchased; but the separation I cannot make any better than I did yesterday. If I had suspected that it would come up again I would have made the necessary investigation.
Mr. MATHEWSON: We will put witnesses on later who will know all about that. Mr. Bradley does not know.
Q. I want to find out from the engineer who has special charge of the production of the gas what amount of gas he purchased last year. Is that the best answer you can give?
A. That is the best answer I can give this minute.
Q. That is the same answer that you gave yesterday?
A. Yes, and if you had asked me yesterday to bring that information I would have done so gladly, but I did not think you would refer to it again.
Q. Since I have had to refer to your affidavit, I find further on the same page—the paragraph I have just read continues:
"The manufacturing plants of the six constituent companies which formed the Consolidated Gas Company in 1884 were originally coal gas plants, but at the present time they have been so far replaced with water and oil gas plants of the latest and most improved methods that the maximum daily capacities of the water and oil gas plants of the company is 45,100,000 cubic feet out of a total manufacturing capacity of the company's plants in operation amounting to 51,000,000 feet."
I understood counsel to say yesterday that there were no oil gas

plants—that there was no oil gas manufactured by the Consolidated Gas Company.

192 Mr. MATTHEWSON: You made a mistake. What I said was that there was no oil gas manufactured except that manufactured to enrich the coal gas at the 14th Street station. No oil gas, as oil gas, is sent out to consumers.

Q. I call your attention to another statement in the same affidavit, another paragraph.

"I am and for more than twenty years past have been familiar with all the manufacturing plants of the Consolidated Gas Company. All of them have been modified or enlarged or renewed during my administration, and I am able to make a very close estimate of their value and I am equally familiar with the said holders. As above stated, much of the greater part of such plants or capacity are up to date water and oil gas plants."

What did you mean by that statement?

A. By what part of that statement? There are several statements contained in the statement you have read.

Q. I mean, as to whether you are engaged in producing oil gas?

A. I think I can clear up that matter in a moment. The oil gas plant—what is known and called there an oil gas plant—is a part of the plants engaged in the manufacture of water gas. As I testified yesterday, the oil is used in the manufacture of water gas, and mixed with it, to give it its illuminating properties, and the oil gas plant spoken of in that affidavit is a plant that was used for that purpose, and it was stated to be *a* water and oil gas plants . order to cover the entire plant. That is all that means. There is no oil gas sent out in the City of New York other than a mixture.

Q. Water gas, then, in which this oil is used, is manufactured cheaper than coal gas, as you testified yesterday?

193 A. Water gas is manufactured cheaper than oil gas, as I testified yesterday, in connection with oil gas, to give it its illuminating properties. When I say water gas, I mean water gas and oil gas. I include the whole.

Q. Water gas in connection with oil——

A. (Interrupting.) Produces the illuminating gas.

Q. Produces the illuminating gas, and that gas is manufactured cheaper than the purely coal gas?

A. Yes, at times; at other times not.

Q. Then you modify the statement that you made yesterday in regard to that, the unqualified statement that it was manufactured cheaper than coal gas, by now saying it is at times.

A. In general it is in New York City.

Q. I am speaking now of New York City.

A. That is correct.

Q. Can you state about how much oil you used last year in the manufacture of such gas?

A. No, sir.

Q. Can you state whether or not year by year for the past five years the amount of oil used by your company has not increased?

A. Not per thousand feet.

Q. I mean in bulk.

A. The use of oil has increased because we are making more gas and have necessarily used more oil.

Q. You are making more water gas in connection with the use of oil, or using more oil in connection with the manufacture of water gas?

A. The use of oil is and has remained nearly steady with the variations due to temperature changes and to slight variations in the quality of oil. The increased quantity of oil used is due to the fact of the increased quantity of gas produced.

Q. Do you know from whom the oil is purchased?

A. To the best of my information it is purchased from the Standard Oil Company of New York.

194 Q. I call your attention to a further statement in the same affidavit, Mr. Bradley. Continuing, you proceed to say: "And all the plants (both coal and water gas) are in the highest state of efficiency at which they can be kept, and they have within the past year produced more gas at lower cost than ever before in their history." Is that statement still true?

A. That is correct, as to the first part, and correct from my standpoint as to the second part.

Q. What causes the cheapening of gas?

A. Improved methods of working.

Q. Does increased consumption?

A. Increased consumption has very little to do with the decreased cost except so far as a certain relation that might be had between a large quantity manufactured and a small quantity manufactured, but the difference in the quantity manufactured between last year and this year is not of sufficient moment to make any probable decrease in cost.

Q. When you first started before 1884, while acting as engineer for the Municipal Company, the price of gas was about how much per thousand cubic feet?

A. $2.50, I think, selling price.

Q. It has been as high in this city as $7 a thousand feet, has it not?

A. Yes, sir; $10.

Q. Ten dollars?

Mr. MATTHEWSON: In 1825 it was $10.

The WITNESS: Yes, sir.

Q. Do you know how long gas as an illuminant has been in existence, the use of it?

A. Oh, in this city, this was about the first start in this city, in this country, I think somewhere about 1823 or 1824 was the first works.

Q. That high price was at the very inception of its use in this community and in this city?

A. Yes, sir. At that time gas was made from resin or shale oil.

195 Q. From whom do you purchase your coal?

A. The coal is purchased from several different—the coal

is purchased on my recommendation or requisition in gross for so many hundred thousand tons for the year's supply. I designate in my requisition the coal that I prefer and the quantity; I divide my gross amount into the quantities that I prefer of each particular kind of coal. The purchasing department or the officials then make the purchases according to my requisition in most cases; sometimes they change it as to the sub-division of kind and quantities. My knowledge of who are the sellers or operators from whom this coal is purchased is a matter of knowledge gathered by me from conversation with the officers of the company. I do not purchase it.

Q. You purchase the other materials going to make up the plants and holders, don't you?

A. I purchase with the approval of the officials of the company, I make contracts.

Q. You purchase coal in the same way with the approval of the officers of the company?

A. I never have, no, sir.

Q. The kind of coal that is used in the manufacture of gas is a very important item, is it not?

A. It is.

Q. And plays a very important part?

A. And plays a very important part.

Q. And requires the engineer's most serious consideration, does it not?

A. It does.

Q. Do you inspect the coal before you purchase, do you make an effort yourself to get the best coal most suitable for the purposes for which it is to be used?

A. As I explained before, counsellor, I make a requisition for the kind of coal which I prefer, which goes without saying is the best coal: I prefer the best coal to do my work. If the officers or purchasing officials or the Directors or the Executive Com-
196 mittee of the company see fit to alter my recommendation as to the kind of coal to be purchased, it is not, to use a common expression, up to me to find fault with it. I use what they give me, and they must take the consequences.

Q. Have you always received the kind of coal you called for?

A. Not always; sometimes—well, most always, I will say, but not always.

Q. Have you received the same kind of coal, say, during the past five years?

A. Oh, no, there have been many changes in kinds of coal during the past five years, both by my recommendation and by action of the officials.

Q. Will you tell the kinds of coal you have used during the past five years?

A. I can tell you some of them and some I may skip, I don't know, because there are a number of them.

Q. I am speaking of the coal that is actually used in the manufacture of the gas as distinguished from the coal that is used for heating the boilers?

A. Exactly. That was my understanding of the conversation we have had.

Mr. MATHEWSON: You mean the gas coal?
Mr. BURR: Yes.

The WITNESS: Do you mean the coal used for water gas or coal gas?
Q. Both.
A. Very well. We have bought coal and are using coal now from the Pittsburg Coal Company——

Mr. MATHEWSON: Just give the character of coal, that is what the question asks for, what kind of coal?
Mr. BURR: Give us all the information you can upon the subject.
197 Mr. MATTHEWSON: I hardly think—don't give the names of the sellers to us.

The WITNESS: We use the Pennsylvania bituminous coal from different collieries; we use also coal from West Virginia, from different collieries. The anthracite coal is all of it from the Pennsylvania anthracite coal region.
Q. What company do you purchase that last-named coal from?

Mr. MATTHEWSON: I think the witness had better not answer that. I do not think you really want that, Mr. Burr, when you know the facts.
Mr. BURR: I am trying to get at the facts.
Mr. MATTHEWSON: I understand, but I do not think it is necessary to spread upon the records the names of the people who sell coal to us. That subject was gone over very carefully before the investigating committee, and again before the Commission, and it was decided both by Mr. Shearn and Senator Page that it would be prejudicial to the interest of the company if the names of the parties with whom they dealt were spread out, and would add nothing to the knowledge of the character of coal, or the price paid. But a statement was put upon the record, stating the amount of the coal and the price at which it was delivered, &c., omitting the names.
Mr. BURR: I will ask Mr. Bradley this question.

Q. The coal you refer to as being bought from the anthracite region of Pennsylvania, that coal is bought in pursuance of a written contract, isn't it?
A. I so believe. I may say positively and without reserve
198 that if there is such a contract, I have never seen it. My r-quisition is made for so many hundred thousand tons of coal, divided up into the kind and character of colliery I wish to receive the coal from. That is turned over to the purchasing department, and if the contract is made, they make it and I do not.
Q. You have already stated that the element of the cost of coal, goes more into the fixing of the cost of the manufacture and production of gas, than any other element, have you not?
A. Yes, sir.
Q. So it is most important that we should get the exact kind of

coal and the exact price you pay for it in arriving at a determination as to how far it goes to make up the cost of the manufacture and production of gas. Is not that so?

A. I think that information can be had, sir, but I must respectfully ask to be relieved from telling that, because you would ask me at once if I made the contracts, and knew it was a fact, and I should say "no."

Mr. MATHEWSON: The original contracts were presented to the Gas Commission in order that there would be no question about it, and they were gone over by them and then an abstract put upon the record, stating the price and quantity, omitting the names. You will find that on the record.

Mr. PAGE: That is not in this record, though.

Mr. BURR: This is an entirely different proceeding.

Mr. MATTHEWSON: I understand, but I am merely pointing out to you the method that was pursued, which I think will commend itself to your own good judgment.

Mr. PAGE: Will you make the same arrangement here in this proceeding?

Mr. BURR: Will you produce the contracts here before the Master?

Mr. MATHEWSON: I think so, under the same under-
199 standing.

Mr. BURR: With that understanding I will not ask for it now from the witness.

Mr. MATHEWSON: I will say this, I have not gone into the cost of gas, and we have asked this witness no question, and you have made this witness your own witness and are doing so now.

Mr. BURR: I fully appreciate that, and am getting all the information I can from the chief engineer.

Mr. MATHEWSON: And the chief engineer has not the custody or making of the contracts, and is utterly unable to give you the information you ask for.

Q. I will not press you to give the names of the companies from whom the coal is purchased, upon assurance of counsel that the contracts will be produced. If they are not produced I reserve the right to ask you further in regard to that matter. Now the holders that you have spoken of, are they single or double holders, or are they single telescopic or——

A. Some are single lift, and some have two lifts, some have three, some have four and some have five.

Q. Will you give those which are single lifts?

A. I will have to ask to modify that statement. There are no single lifts. Looking at my memorandum I find that to be so.

Q. Give us the location of the double lifts.

Mr. MATHEWSON: Is not Inwood a single lift?

The WITNESS: No, that is the one I had in mind when I said single lift. There are eight at 14th Street.

200 Q. At West 14th Street?

A. East 14th Street. There are——

Q. One moment, Mr. Bradley. Can you tell me the pressure which each of these holders will stand, or will give, I mean?

A. No, I cannot give that off-hand.

Q. Have you ever sought to ascertain that information?

A. No, not as a matter of record. I have never sought to ascertain it. We have pressure gauges in the valve houses on the holders, and it can be readily told by inspection at any time, and is perfectly accessible and was never considered of sufficient importance to make a record of it.

Q. Has it not some bearing upon the pressure at which gas is delivered?

A. No.

Q. No?

A. No.

Q. But the pressure which each holder will give, by a well known formula, can be easily ascertained, can it not?

A. Absolutely, yes, sir.

Q. Give us the other double lifts.

A. There are six at 18th Street; this record as to whether they are double or single lifts is not here, I am simply going now from my best recollection of each lot, as I see them here; I may make a mistake of a holder or two, but not intentionally. 21st Street there is one; 42d Street we have four—these are double lifts. 44th Street, 5; 65th Street, 6; 99th Street, 1; Inwood, 1; I think that, to the best of my recollection, is all of them.

Q. Can you give us the diameter of each of those holders?

A. That I cannot give you; I can give you the cubical contents, but not the absolute feet and inches of diameter, I haven't it.

Q. Has that ever been ascertained by you?

A. Most undoubtedly. I could not get this if I did not get that.

Q. There is, therefore, a record of it?

201 A. There is an absolute record of diameters, yes, sir; but I have not it with me.

Q. Will you furnish me with a statement regarding it?

A. If there is no objection on the part of counsel, yes, sir.

Mr. BURR: Is there an objection on the part of counsel?

Mr. MATHEWSON: I think not.

The WITNESS: Is there any other information you would like there besides diameter?

Q. Well, is there any difference in the formation of these holders? I mean in their structural formation, as to material, for instance?

A. Oh, yes and no; they are an iron shell with a roof to confine the gas.

Q. Do they vary in height?

A. They vary in height.

Q. Can you furnish me also a statement as to the height of these holders?

A. Now I have written here diameters of holders; what I should say was dimension of holders.

Q. Yes.

A. Very well, sir.

Q. Are the tanks you have referred to masonry tanks or iron tanks?

A. Some of them are masonry and some are iron.

Q. Will you tell us which are masonry and which are iron?

A. Now, or with this other information?

Q. If you can give it now it will be acceptable; if not, we will take it with the other.

A. Do you refer now to just these holders I have enumerated, or all of the holders?

Q. All of the holders.

A. Very good. There is one at 14th Street.

Q. One what?

A. One holder in a steel tank, or iron tank as you term it. One at 63rd Street——

202 Q. Iron tank?

A. Iron tank, or to be more exact, a steel tank. Two at 111th Street.

Mr. MATHEWSON: Are you sure that is a steel tank at 63rd Street? Is not that masonry?

The WITNESS: I beg to be excused on that. 63rd Street is a steel tank, yes, sir. You know more about it than I do. Please correct that. One at 132nd Street. I think that is all of them, three.

Q. Then to resume, there are how many masonry tanks?

A. There are 45 in all.

Q. And how many steel tanks?

A. 3. 42.

Q. 42 masonry?

The WITNESS: 42 masonry.

Q. The city is the largest consumer by all odds of gas manufactured by your company, is it not?

A. It is a very large consumer; whether the largest or not I cannot say.

Q. Have you any doubt about it?

A. We have other very large consumers. I do not think there is any question about it, but I cannot say positively.

Q. Have you any other consumers that take as much as five hundred million cubic feet a year or near that amount?

A. Very probably not, I do not check the meters and do not make up the bills, I do not collect the bills, or look at the sales books; therefore I——

Q. You must have some information on the subject when you say you have other very large consumers. Will you tell us the largest consumer of which you have knowledge outside of the City of New York?

A. The National Biscuit Company is one of them.

Q. What is the total consumption of gas by that company per year?

A. I cannot tell. I have simply been told it is a very large consumer and I know we laid an 8-inch service pipe to supply
203 them with gas. Those are the facts I rely upon when I say they are very large consumers.

Q. Do you supply any other gas companies with gas?
A. We have done so. At this moment we are not doing so.
Q. How recently?
A. Two years ago we supplied the Mutual Company with some gas.

Mr. MATHEWSON: And they also supplied you with gas in the same year did they not?

The WITNESS: They also supplied us.
Q. That reminds me, Mr. Bradley. How do you keep track of the gas that is furnished by other companies? Where is the check showing the actual amounts that you received?
A. That is a matter of bookkeeping, sir, that is attended in the general office.
Q. Is it not a matter of mechanical engineering?
A. No, sir.
Q. Is it not part of the business of the station receiving the gas?
A. It is when it is received in the station. If it is turned directly into the main no station has any business with it.
Q. Well what method do you, the chief engineer of the company, resort to to ascertain that the amount that is charged by the companies is the correct amount which has been received by your company?
A. I don't know that I adopt any method for that purpose.
Q. So that there is no supervision over the delivery of the gas by these companies to your company of which you are chief engineer?
A. Yes, sir, there is.
Q. What is that supervision?
A. Any station, by the indications of the station records, manufactures a certain number of million feet or other number of cubic feet per day. They also send out a certain number of cubic feet
204 per day, which is very readily ascertained from that station. If at the end of the month it is shown by the consumers' meters that a larger quantity of gas has been consumed or has been registered than is called for by the manufacture and send-out at this station and at the same time we know that another company has been sending gas into those mains, we know how much has been received.
Q. How about the leakage?
A. The leakage is accounted for on a theoretical basis, which is the only way it can be.
Q. You don't know how much of the gas that is purchased by your company leaks, nor do you know how much of the gas that you manufacture leaks, is not that so?
A. We know how much the difference is between the make and the send-out.
Q. Therefore it is very important that you should know how much the company has agreed to deliver to you?
A. We do know as nearly as possible.
Q. How are you going to ascertain the leakage, unless you know how much they have agreed to deliver to you?
A. The only way I can ascertain in any event it to take the difference between the make and the send-out. In any event, either with-

out gas being purchased or with gas being purchased, there is no other known method of ascertaining it.

Mr. MATHEWSON: Don't you mean the difference between the make or send-out and the consumers' meters?

A. The make and send-out and the sales, of course. If we send out a million feet of gas and our consumers' meters register 900,000, we have lost 100,000 feet, and that is the only way that it can be told what the leakage is, by the difference.

Q. In ascertaining the value of a ton of coal, it is very
205 important to know the amount of gas as the result of the use of a given number of tons, is it not?

A. Yes, sir.

Q. So it is very important for you, as a very careful engineer, to ascertain exactly the amount of gas that you manufacture yourself, is it not?

A. That is a matter that is very easily ascertained and is ascertained every day. That has no bearing whatever on leakage.

Q. I probably may be a little confused about this, but I gathered from you that in some way the gas that is purchased from other companies is mixed up with your gas in the mains?

A. Certainly, that is what we purchase it for, to mix it up and use it.

Q. I am anxious for my own information to ascertain in what careful manner you go about ascertaining exactly what amount of gas is delivered by these companies under contract to supply you with gas in addition to that manufactured by your company?

A. That is what I endeavored to explain. If I did not make myself clear I will try again. We make a certain amount of gas in a station per day or per month or per year. That amount is registered accurately by the station meters. From the gas holders we get a record——

Q. Pardon me a moment? Do you mean by the station meters and then entered into the book kept at each station?

A. Kept at each station daily.

Q. Do those books show the daily receipts, the amount daily received at that station?

A. It would show the amount daily manufactured, not received; manufactured. That gas is delivered into the gasholders. A record of the height of the gasholders, of the contents of gasholders shows at seven o'clock in the morning how much gas has been manufactured, the height of the holders shows so much gas on hand, the
206 balance has gone out, the difference between the manufacture and the quantity on hand has gone out to the consumer; that disposes of that. Another company makes gas for us, that is turned into the holders. When it is turned into the holders it can be measured in the same manner by the known dimensions of the holders and the capacity per foot or per inch as to how much is contained in that holder. In the case where it is turned into the mains direct, in the case of the Mutual Company, they turned the gas into our mains from a single isolated holder, and could measure

the quantity sent into our mains, as well as we could measure it by the station meter, as accurately.

Q. That is, the seller could measure it as accurately as the purchaser?

A. Exactly.

Q. Do you rely entirely upon the measurement of the seller in that instance?

A. Not entirely, no; we have the right to send and verify it, and do verify it as far as possible.

Q. Do you know as a matter of fact that you have verified the——

A. Yes.

Q. Where is the result of the verification contained?

A. Somewhere in the books; the original papers of the verification were probably destroyed, the entry simply made and the papers destroyed.

Q. Do I understand you to say that such important information as the exact amount of gas delivered from that one Mutual Company, was destroyed?

A. I say yes, those papers were destroyed. None of us think that those are very important records to keep, the papers; when the papers are turned in and the record made on the books—the papers containing the slips, the papers showing that, never were important records.

Q. You mean to say that the original memoranda has been destroyed, although their contents have been duly entered in the books of the company?

A. Certainly.

Q. Those books are still in existence?

A. Yes.

207 Q. They have not been destroyed?

A. No, sir.

Q. Can you tell us what is the utmost capacity of their present plant in the City of New York?

A. The Consolidated?

Q. Yes, sir.

A. Fifty-one millions.

Q. How much more can you produce than the fifty-one million if required?

A. Oh, we might on an emergency for a few days produce slightly more, perhaps two or three millions, but I would not like to undertake to do that for a month steadily.

Q. How much can be produced from the plants of these other companies that you have made reference to here to-day?

Mr. MATHEWSON: Objected to as immaterial, irrelevant, not cross-examination.

Question allowed; exception.

A. 62,078,000.

Q. Is that the utmost of their capacity?

A. That is the rated capacity and the utmost capacity, with the exception as I said of the Consolidated, that in an emergency they

might produce a million or so more. It is not considered capacity, being able to crowd a works for an emergency case.

Q. How do you arrive at that conclusion?

A. From memoranda that I have, from general knowledge of the plants.

Q. Will you give us the details of the memoranda that you have and from which you have made up that conclusion?

Mr. MATHEWSON: Objected to, as irrelevant and immaterial, not cross-examination, relating to these other companies.

Question allowed; exception.

A. Detailed by companies?

Q. Yes.

208 A. New Amsterdam Company thirty million; Standard Company, ten million; Mutual Company, twelve million; Central Union Company, nine million—my memoranda shows 9,300,000, but I think it is incorrect, sir.

Q. In what respect, more or less?

A. I think it should be 7,500,000, as my memory serves me.

Q. But your memorandum shows nine million?

A. Yes, but it is like other memoranda, not infallible.

Q. From what sources do you procure that information?

A. From an inspection of the works and from companies' engineer information.

Q. From companies' engineer information?

A. Engineers.

Q. Is there a peculiar kind of information supplied to the company's engineer?

A. Perhaps I should say information derived from the company's engineer.

Q. Statements made to you by him?

A. To me by him.

Q. What is his name?

A. Elliott C. Spencer.

Q. What company are you speaking of?

A. Central Union Company.

Q. And you think your information is better than his memorandum is?

A. The memorandum is my memorandum made by a typewriter and the typewriter may have made an error; I am suspicious that it is wrong.

Q. Well, proceed.

A. Northern Union, 778,000 cubic feet.

Q. Is that station going?

A. It is not operating at present.

Q. How long has it ceased to operate?

A. Oh, for several years past, I can't say how long because I was not connected with it.

Q. Five years, or longer than that?

A. I think it was operated once within five years.

209 Q. Now these latter companies that you have just named are companies that are owned or controlled by the Consolidated Gas Company, are they not?

Mr. MATHEWSON: That is a conclusion and I object to it as such, and as not cross-examination. If the Consolidated owns their stock, that fact, I suppose, can be shown, or how much the Consolidated owns, and it carries its own conclusion.

The MASTER: That is not the best evidence, of course, but I think under the circumstances I will allow it for what it is worth.

Exception.

A. As far as any personal knowledge goes I may say I do not know.

Q. You do not know?

A. I don't know.

Q. Do you draw a distinction between personal knowledge and any other knowledge?

A. I draw a distinction, I have been taught to right here, as between what I know and what has been told me.

Q. But you know so much that you supervise the workings of those plants, do you not?

A. If requested or if I think it is desirable. I have been told by the officials of the company that they owned stock in certain of those companies, and as chief engineer of the Consolidated Company it is my business to do whatever may be done to further—to safeguard the value of the property of the company.

Q. And in safeguarding the interests of the company and its property, you have exercised a supervision over these companies?

A. A general supervision, most general in its character.

Q. A careful supervision, I presume?

A. Most general in its character, I said, sir.

Q. Would you say it was a careless supervision?

210 A. Not careless, but particular so far as the particular things I was engaged in supervising.

Q. Let us have an instance of what that supervision consists of. Do you seek to ascertain the amount of gas made by them?

A. Personally I do not. It is sent to my office every day.

Q. Is it furnished to you every day?

A. It is, the amount of gas made.

Q. Do you require that that information should be sent to your office every day?

A. Yes, sir.

Q. If you find that an engineer in charge of any station is incompetent, do you discharge him?

A. I do not.

Mr. MATHEWSON: He has no power to, Mr. Burr, not the slightest.

The WITNESS: I would not consider I had the power to do that. I have never tried to exercise it, but would not attempt to exercise it.

Q. Would you knowingly permit an incompetent engineer to have charge of one of those plants?

A. If I had reason to think an engineer was incompetent, I would refer it to the officials of the company.

Q. You would feel it to be your duty to bring that knowledge home to the officials of your company?

A. Yes, sir, and they could act as they saw fit.

Q. In 1905 your company manufactured 8½ billion cubic feet of gas, did it not?

Mr. MATHEWSON: What year was that?

Q. Is it not true that in 1905 the Consolidated Gas Company manufactured 8½ billion cubic feet of gas?

A. I should say that was nearly correct. As to absolutely saying yes, that I know it to be a fact, I cannot, because I haven't the record before me.

211 Q. The record is in existence, showing the exact amount?

A. Yes, sir.

Q. And in 1905 did not the Consolidated Gas Company purchase 4½ billion cubic feet of gas?

A. The answer to the last question is the one I shall have to make to this also.

Q. Please repeat it?

A. I should say that the figures were approximately correct, but not having the record before me I cannot say.

Q. And the record of the purchases is in existence?

A. The record of the purchases is in existence.

Mr. MATHEWSON: As a matter of fact, it is not approximately correct.

Q. Are you the owner of stock in the Consolidated Gas Company?

A. I am.

Q. Are you the owner of stock in these other companies that you have mentioned here to-day?

A. I am not.

Q. How long have you been an owner of stock in the Consolidated Gas Company?

A. With a slight interruption, ever since the consolidation.

Q. In 1884?

A. 1884.

Q. Are you an owner of stock in the Astoria Light, Heat and Power Company?

A. One share, yes.

Q. Are any shares held in trust for you?

A. No, sir.

Q. Did you select the site for the building of the Astoria Light, Heat and Power Company plant?

A. That involved two things, sir.

Q. Separate them.

A. So far as selecting the property originally, I did not.

Q. Who did?

A. Mr. John D. Crimmins.

212 Q. He is the gentleman who sold property to the company, a deed of which was introduced here, for $750,000?

A. Mr. John D. Crimmins knew we were looking for prop-

erty for that purpose; he discovered it, brought the information to us, I went over and looked at it and approved of it; that was the entire history of my connection with the transaction.

Q. Did you notice the amount of land under water?

A. I didn't see it at that time, no, sir.

Q. Did you figure as an engineer upon the amount of cost of filling to make that land available?

A. No, sir, that was long after, that was done.

Q. But you did long afterwards take that into consideration?

A. Long afterwards it was taken into consideration, yes sir.

Q. But in the selection of the site, its availability, practicability and economy, those considerations did not enter into your mind at the time?

A. That was the only consideration I had in my mind at the time.

Q. What was it?

A. That it was a well situated piece of property.

Q. Economical?

A. Economically situated and in just about the place we wanted it.

Q. Then you must have given some consideration to the fact that there was a considerable quantity of this land under water?

A. How much of it there was under water at that time I had no means of knowing, I simply examined the site as to its fitness, as to location, situation, and as to whether it was a good place for a gas plant.

Q. Therefore you must have gone over the ground very carefully and with a technical idea to its advantages as a place for the construction of the greatest gas plant in the United States, didn't you?

A. No, sir; it does not require any very great engineering knowledge to look at a piece of ground and see whether it is a good place to build a gas works.

Q. Any piece of ground would do then?

A. Almost any piece would do.

213 Q. The cheapness or dearness would have nothing to do in the result of the ultimate production of the gas?

A. No, sir.

Q. Didn't you consider anything as to the accessibility of the plant and the ground upon which it was to be placed, the depth of water and so forth?

A. I made general inquiry as to that fact, yes, sir.

Q. When did you do that, after the talk with Mr. Crimmins?

A. When I made the examination of the property.

Q. You must have observed then the land that was under water?

A. I could not observe the land under water because it was under water.

Q. You heard the testimony of Mr. Francklyn here sub-dividing 376 acres which were purchased into upland and land under water?

A. Yes, sir.

Q. So it must have occurred to you as it did to him that there was that distinction to be made?

A. It did not occur to me because at that time there wasn't anything like that quantity of land under water.

Q. How much was there under water at that time?

A. Perhaps half of it, I am not sure as to details of the figures.

Q. How can you say there wasn't so much under water at that time?

A. Because since that time the United States Government has established new bulkhead lines and inclosed more property of land under water.

Q. And that is added to the holdings of the company, an unearned increment, so to speak?

A. Added to the amount of land under water which at that time was outside bulkhead lines but is now inside.

Q. Then did you talk with other officers of the company after you talked with Mr. Crimmins?

A. I talked chiefly with the president of the company, yes, sir, that was my—he was the gentleman that I talked to more
214 more particularly. I talked with all of them.

Q. What was his name?

A. His name was Mr. H. E. Gawtry.

Q. That is the same gentleman that is vice-president?

A. No, sir, father of the present vice-president.

Q. You talked with Mr. Gawtry and with Mr. Crimmins?

A. I did.

Q. Did the president ask you to prepare a report from an engineering standpoint, upon the availability of the proposed location at Astoria?

A. I do not recall now that he did.

Q. Do you mean to say that they did not ask you to go over there and look the ground over and report to them upon its availability as a site for a gas plant, the greatest in the United States?

A. They did, and I not only went over there, but went over there with them.

Q. Did you make a report on it?

A. I made a verbal report.

Q. No written report?

A. No written report, not that I recall now. The conditions did not require a written report.

Q. The officials did not require a written report?

A. The conditions, I say, did not require it.

Q. Then no report was ever submitted by you to the Board of Directors of the Consolidated Gas Company?

A. Not that I recall now as a separate, independent report that certain things should be done, and might be done, and may be done.

Q. Well, you were quite clear a moment ago you did not make any report in writing, that it was merely a verbal report made by you to Mr. Gawtry and Mr. Crimmins when you went over there in their company?

A. I said I made a verbal report; I did not say I made no other report and I did not care to be so understood, and I do not
215 wish to be told that I said so.

Mr. MATHEWSON: He said he could not remember it now.

Q. Is that your answer, that to the best of your recollection, you did not make a written report?

A. As to a separate, distinct, written report on the land in question at Astoria, whether I have made such a report, I cannot now state; that I have made any incorporated in other reports, different reports regarding Astoria, is true; whether any formal, absolute layout of my intentions or recommendations to the company, I cannot say.

Q. Were those that you believe you made, these recommendations embracing incidentally some recommendations about the Astoria plant, subsequent to your visit to that place with Mr. Gawtry and Mr. Crimmins, or before?

A. Subsequent.

Q. What year was it you made the visit with Mr. Gawtry and Mr. Crimmins?

A. The date can be fixed by a reference to the record of the deed a little better than I can fix it. I should say six years ago.

Q. That was 1900?

A. About 1900.

Q. Did you ascertain at the time that you went over there to look at the ground, what it was going to cost?

A. No, sir.

Q. Didn't the element of its cost to the Consolidated Company have any point in any amount to be discussed with them?

A. I was not asked to give any opinion as to the cost as I am not a real estate expert, I was simply asked to give my opinion as an engineer as to whether it was an available site for a gas plant.

Q. Now is this plant expected to reduce the cost of the production of gas here to the consumer?

A. Perhaps so. It is hoped so.

216 Q. Was it expected to reduce the cost of production and distribution to the company?

A. One goes with the other.

Q. Not necessarily.

A. It seems so nowadays.

Q. And as an engineer of over twenty years' standing, were you not anxious to find out what the cost of this whole outfit was to be, this whole plant?

A. That I found out subsequently; not at that time.

Q. I understood you to say a moment ago that the cost of the land upon which a gas plant is constructed does not enter into consideration when it comes to the question of how cheaply gas can be manufactured.

A. When it comes to making an estimate, yes, but when I am asked as to whether or not a certain piece of ground is suitable ground on which to erect a gas plant, I do not consider that it has anything to do with the cost of the gas plant; that is something I have not anything to do with.

Q. And have you since 1900 made any formal written report upon the subject of the Astoria Light, Heat & Power Company's plant at Astoria?

A. That question I have already answered several times within the last fifteen minutes, that so far as any absolute written report as

to practicability or possibility or probability of erecting a gas plant there was concerned, I could not say that I have.

Q. What was the first thing you did after the visit with Mr. Gawtry and Mr. Crimmins toward the construction of the plant over ther-?

—. The next thing I did was to lay out the plant.

Q. To lay out the plant; by that you mean what?

A. Decide upon the arrangements of the buildings, and what the plant should be.

Q. And the sizes of them?

A. And the sizes of them.

217 Q. And with that in view, you have to keep constantly in mind the availability of the situation for the manufacture of gas, have you not, the availability of the location for the successful and economical manufacture and distribution of gas?

A. That question was disposed of before the time the property was purchased.

Q. Was it disposed of in the interim between the date of your visit there with Mr. Gawtry and Mr. Crimmins and the time you were asked to lay out the plant?

A. I certainly was not asked to lay out the plant until the property was purchased.

Q. You had nothing to do in regard to that?

A. No, sir.

Q. When you were called to lay out the plant, your attention was called to the upland and the land under water, was it not?

A. That came into my consideration.

Q. Then you must have made some investigation as to the availability of that particular location, as far as access was concerned?

A. No, I made no special investigation as to that, because I knew perfectly well how access was to be obtained to it, and there had been no changes in the conditions, and there is not to-day.

Q. The access was by water, was it not?

A. The same as it is now.

Q. You made some inquiry to ascertain whether the proper depth of water was there, did you not?

A. I made soundings to ascertain that the proper depth of water was there.

Q. And you satisfied yourself that you had the proper depth?

A. Yes, sir.

Q. Much of the land under water was filled in, was it not?

A. A large portion of the land was filled in, and there remains still a large portion to fill in.

218 Q. The contract for the construction of these units, the single units that you have over there—was that let out at public bidding?

A. No, sir, we never let out anything at public bidding.

Q. Was it private bidding?

A. Private bidding.

Q. What concern had the contract for that?

A. About forty concerns.

Q. A plant having forty component parts, each part let to a separate contractor, is that it?

A. No, sir; I say from thirty to forty different contractors. Some two or three contractors worked on the same building, in the steel construction, in the brick construction and in the roof construction, and the interior apparatus.

Q. I thought it possibly might be, as you testified yesterday, that this concern in Baltimore took the contract to build the whole plant?

A. I do not remember so testifying. I testified that Bartlett & Heyward took the contract to build the gas holder for us, which is not a gas plant.

Q. Did they take a contract to build the gas holders over there at Astoria?

A. They took the contract to build *a* gas holder at Astoria.

Q. What is the size or the dimensions of that gas holder?

A. 300 feet in diameter, and 49 feet deep, I think, with a capacity of 15,000,000 cubic feet.

Q. Is that the only holder there?

A. That is the only holder so far in process of construction. There is another tank building alongside of that which will ultimately contain another holder, of the same size.

Q. What is the difference between a tank and a holder?

A. The tank is the tank that holds the water, and the holder is the holder that holds the gas. The same difference that there is with a barrel that has a pail in it. What is the difference between a barrel and a pail?

Q. When did work first start there?

A. Some three or four years ago.

219 Q. When did they complete the holders?

A. The holder is just barely commenced. When you say "When did you start work there" do you mean on the holder?

Q. Yes.

A. They only started the field work on the holder—excuse me; I thought you said when did we commence work on the plant—we commenced work on the holder about two months ago.

Q. Prior to that, the work on the plant, as distinguished from the holder, had been progressing for how long?

A. Three or four years.

Q. How long will it be before that plant is finally completed?

A. Which plant do you refer to now. The one unit or the entire plant?

Q. I speak now of the first unit?

A. The work we are engaged in now?

Q. Yes.

A. I will answer your questions when I get them clearly. My present intention is, if I am not interrupted or delayed, to produce gas there this coming fall, perhaps in the latter part of October, or in November.

Q. Are these thirty or forty contractors that you have referred to still working over there?

A. Many of them are, but I will say now that I do not wish to be

absolutely quoted as saying that the plant will be completed at that time; that it will be sufficiently completed to go on and make gas. There are many other things to be done.

Q. How many units do you hope to establish there or intend to establish there?

A. The plans as laid out are for twelve units, but it will take a number of years probably beyond the time of my allotted life to do that——

Q. How many years?

A. Perhaps ten or fifteen years—(continuing former answer)—to absolutely complete the whole thing. There may be changes in the art of manufacturing gas and changes in conditions that
220 will make those plans absolutely useless, to be changed and altered as we may, or as my successor may, find desirable or proper. I will not confine myself to saying that that work will be completed exactly as I have laid it out.

Q. The production of gas is in a state of progress and improvement, is it not?

A. Yes, many changes have been made in my time, and many more will undoubtedly be made.

Q. There is room on your vacant land in the City of New York for the construction of some other plants and some other holders, is there not?

A. We might make a piece of patchwork gas plant; there is room for holders, and we might continue to patch, and keep patching up indefinitely, but it will be more expensive both to the company and to the consumer to undertake to do that.

Q. You do not call "patching up" the construction of a new plant, do you?

A. When I say "patching up" I mean patch on to some other works. Where the site is not desirable, or the site is too valuable, or to much surrounded by dwelling houses.

Q. Then the value of the site does have something to do with the question. You say the site might be too valuable?

A. Yes, in that respect.

Q. What do you mean by that?

A. Because where a site is sufficient to build one plant in the City of New York, it is probably worth more than the whole Astoria plant, where there will be twelve plants.

Q. Then it is a question of economy to the company to move to Astoria; is that it?

A. I have always considered that, sir, as a question of necessity.

Q. For the reasons stated by you yesterday?

A. For the reason that it has been rendered almost impossible to carry on the manufacture of gas in the City of New York.

221 Q. I understood you to testify yesterday that you still intended to continue the plant in operation here now?

A. We intend to continue manufacturing gas here until we can get some other place to manufacture it, and must necessarily do it.

Q. Didn't you say yesterday that the Astoria plant was merely supplementary to the plants in existence here?

A. As it stands to-day, it is an extension of the present plant.
Q. Supplementary?

Mr. MATHEWSON: He said the first unit was.
The WITNESS: The first unit.
Mr. MATHEWSON: Four billion feet a year.
The WITNESS: We cannot supply our consumers with a twenty million plant, and we must of necessity continue to manufacture gas in New York until we get plant enough to do so somewhere else.

Q. Would you describe as patching the process of building a new extension to a plant already in existence here in the city of New York, for the purpose of enlarging its capacity to manufacture and distribute gas?
A. In general terms I should characterize it as patch-work.
Q. There is room for several such patch-works here in the City of New York, on the grounds already owned by the Consolidated Gas Company, is there not?
A. I should like to be informed, sir, where it is.

Mr. BURR: I refer to Complainant's Exhibit 48, produced here by Mr. Francklyn.
The WITNESS: Where is Exhibit 48?
(Mr. Gans hands Exhibit 48 to the witness.)
The WITNESS: What page?

222 Q. Just glance your eye over the map there and see where Mr. Francklyn has marked the land vacant and unoccupied?
A. I do not know whether I have got the right one, sir. I do not see anything marked vacant here, anything at all. I fail to see any marked vacant on this exhibit.
Q. Is that because the exhibit does not show it, or because you have made investigation on that subject?
A. I understood you to say, sir, that it was marked vacant.
Q. I understood so too, sir?
A. I am looking for it and I cannot find it.

Mr. BURR: However, the testimony of Mr. Francklyn speaks for itself on the subject.

Q. What do you mean by replacement?
A. Where apparatus is for any reason superseded by new apparatus.
Q. That is where the structure is made new, as distinguished from repairs?
A. Yes.
Q. What do you understand by repairs?
A. Repairs is where an existing piece of apparatus is broken down or is in need of repairs, as for illustration, I will say a pump. If a pump breaks down or breaks any of the parts, it is repaired. When the benches are burned out they are repaired. Anything of that kind. I need not go on.
Q. Replacements can be divided into two subheads, new construction and repairs?
A. No, I do not consider that to repair a thing replaces it.

Q. What is the difference between new construction and replacement?

A. New construction is addition. If I have a plant making 5,000,000 feet a day and I increase it to 10,000,000 feet a day, that is chargeable to construction, because it is additional plant, additional to what I have already. If I repair my 5,000,000 plant and
223 still get the 5,000,000 out of it, it is repairs. If some of the pieces or apparatus are replaced in this 5,000,000 foot plant, it is replacement.

Q. Is replacement charged to construction?

A. No, sir, if it was it would show in the construction account. I would not be able to testify, as I said here the other day, what was replacement and what was construction.

Q. Then when you speak of additions, you mean new construction?

A. I mean new construction. It is new construction, which is an increase in capacity of any plant.

Q. The 21st Street plant and the 44th Street plant were entirely rebuilt, were they not?

A. They were not; no, sir.

Q. Didn't you testify that they were entirely rebuilt in 1904?

A. I did not.

Q. The 99th Street plant has been extensively rebuilt or added to in the last two years, has it not?

A. Yes, there has been a considerable amount of construction there.

Q. I call your attention to the question appearing upon page 82. You said:

"A. At the foot of 21st Street, East River, east of Avenue A, is what is known as the 21st Street station of the Consolidated Gas Company, that is a water gas plant, of a capacity of water and oil gas of 27,500,000 feet per day."

Then I asked you:

"Q. What is the present physical condition of that plant?" To which you replied: "It is in good order. Two years ago it was almost entirely rebuilt with a generating house."

A. Rebuilt *in* the generating house. The plant *in* the generating house was almost entirely rebuilt. That is the only portion
224 of the plant that was rebuilt.

Q. Do you want to change your testimony in that regard?

A. I do not think that I want to change it. I think that the stenographer or the printer want to change it.

Mr. MATHEWSON: The minutes are wrong, because I know particularly what he stated at the time, and I knew that was not the fact, as it reads there. It should be "in the generating house."

Mr. BURR: Then it ought to be changed, at the top of page 83, his statement beginning on the last line of page 82?

Mr. MATHEWSON: Yes.

(The first line on page 83 of the record is changed to read, "It was almost entirely rebuilt, I mean in the generating house.")

By Mr. MATHEWSON:

Q. While you are on that point, may I ask this one question—whether you meant the house itself, or the machinery in the generating house?

A. I meant the machinery *in* the generating house. The house itself was not rebuilt. The house itself was just the same. The machinery was rebuilt inside of the house. We speak of the apparatus as a generating house or purifying house or exhauster house or condenser house. I do not mean the actual bricks or mortar or roof which form the house. I mean the plant inside.

By Mr. BURR:

Q. You do not know, as a matter of fact, how much of that rebuilding was charged to new construction and how much to repairs, do you?

225 A. As a matter of fact I cannot subdivide that. I believe it was charged to replacement, because there was apparatus taken out which this replaced. When I say this I mean the plant in the generating house that we have under discussion.

Q. In devising ways and means for the construction of the Astoria plant, and in advising its construction, you took into consideration, undoubtedly, the probable increased consumption of gas in the City of New York?

A. I am always looking into the question of the increased consumption of gas in the City of New York and have been for twenty years. That did not necessarily come in with the Astoria plant. There is a constant increase, and has been every year.

Q. I understood you to say yesterday that owing to the competition of electric lighting it was decreasing?

A. I seem to be very unfortunate in making myself understood here.

Q. Didn't you say it had decreased in certain years?

A. What I said was that in one district downtown, between Grand Street and the Battery, there had been a constant decrease. But in other parts of the city there has been a constant increase.

Q. What is that due to?

A. To the increase in population.

Q. Can you tell the amount *per capita* of gas that is consumed in the City of New York?

A. No, not off-hand.

Q. You have not made a study of that?

A. I have seen it and I have considered it and figured it and thought of it, but never with any idea of making a very important matter of it or charging my mind with it.

Q. Are you acquainted with Professor Humphreys?

A. I am.

226 Q. Did you hear him testify before the Gas Commission?

A. I was not there when he testified and did not hear him.

Q. In your opinion, has the point of saturation, as expert engineers speak of it, been reached in the City of New York?

A. No, sir.

Q. Let me read you the testimony of Professor Humphreys, called as a witness on behalf of your company.

"In considering the question of increase in sales a good many points have to be considered, and certainly what I should call the point of saturation has to be considered to-day. If my information is correct, and I believe it is, New York is selling more *per capita* than any other city in the world. It is selling 9,200 feet annually *per capita*—a little less, about 9,000 feet, I think it is. London is selling somewhere between 8,000 and 8,500."

Do you agree with that statement of Professor Humphreys?

A. In what respect? There are several statements there. Which one?

Q. In respect to the statement that New York is selling more gas *per capita* than any other city in the world?

A. Professor Humphreys is an able engineer, and if Professor Humphreys makes that statement I should say he was correct. I should be willing to accept it as being correct, without question.

Q. Then will you explain the reason for the construction of a coal gas works at Astoria with a capacity of two hundred and forty million cubic feet?

A. Will I explain it?

Q. Yes, can you give any good reason for its construction?

A. When that first works, or plant, was in its inception, as
227 I testified yesterday, and as I now repeat, it was intended to transplant the gas works in New York City over there, which would take up a considerable portion of the first construction for the first years. During the coming years there is undoubtedly going to be more gas used, and we must not only increase, must not only provide for our present needs, but we must also provide for the future. If you will consider that an eight or ten per cent. increase in gas consumption per annum is considered among engineers not to be anything extraordinary—it is a very common thing—you must consider what that increase means to us; it means a gas works of eight or ten million feet a year to be provided for, for the increase.

Q. You stated yesterday that if the investment was not made over there it would have to be made over here?

A. Undoubtedly we have to supply the gas, and we must be in a condition to supply the gas. If our works here are inadequate, and we have to provide means, we must make it either in Astoria or in New York.

Q. But you are supplying it now to the utmost requirement?

A. Exactly, but we are looking to the future.

Q. You have so much money over and above your immediate necessities that you can invest it in this great plant at Astoria?

A. Personally I have not.

Q. I am speaking of the company.

Mr. MATHEWSON: I object to this as calling for a conclusion and as hypothetical.

The MASTER: Does that add anything to the material upon which I am supposed to report in this case?

Mr. BURR: I think so. I think the whole question as to the advisability of this plant in Astoria has a great deal to do with
228 it, where they seek to charge the cost of it to the consumers.

The MASTER: Unquestionably.

Mr. BURR: And it is a question whether it is needed by gas necessities or needed by stock requirements or stock flotations.

The MASTER: Unquestionably, but is not that better gotten at from the office, rather than taking the chief engineer of the plant and asking him the question in that form, as you have put it?

Mr. MATHEWSON: We will subsequently produce here men who will testify with knowledge.

Mr. BURR: In view of the fact, may it please you Mr. Master, that this gentleman has been for twenty-six years so closely identified with this company that there is scarcely anything pertaining to it, I am satisfied, that he is not somewhat familiar with?

The MASTER: I am not disposed to curtail your cross-examination, but it seems to me that that form of question is not calculated to add very much to my information.

Mr. BURR: The form may be inartistic, I will admit.

Q. Have you familiarized yourself within the past day with the details of these items of additions, replacements and repairs regarding which you testified when you were examined by Mr. Garver?

A. No, sir; I have given them no further consideration.

Q. So that there may be no mistake about it. You have testified here from a statement furnished by the company, or some officer of it, or some employee, from the original books of entry?

A. Yes, that is correct.

Q. And you do not know whether those entries are cor-
229 rectly transcribed from the original books, to your knowledge?

A. To my knowledge, no, sir. I believe them to be correct, of course.

Mr. BURR: And therefore, I ask now to move that his testimony with regard to the amounts expended for replacements, repairs and additions from 1884 to 1905, be stricken out as secondary evidence, not the best evidence, it clearly appearing from his own testimony, as he stated yesterday, that he testified from a transcript from the original books of entry, regarding the correctness of which he is not prepared to swear.

The MASTER: I will deny that motion without prejudice.

Exception taken by Mr. Burr.

(Here a recess was taken until 2 o'clock P. M.)

After Recess.

Mr. MATHEWSON: Mr. Master, in order that there may be no misunderstanding, I wish to draw your attention again to the fact that counsel for the city is confessedly going out of the realm of cross-examination and examining the witness as his original witness, and upon some matters which I assume he supposes to be valuable, thereby consuming part of the thirty days assigned to the complain-

ant for its own evidence; in other words, virtually transferring part of the forty-five days assigned to the defendants into our thirty days. It is a situation which it seems to me should be taken into consideration, and it also interferes to a certain extent with the presentation
of our own case in the order in which we had determined,
230 and when the examination of the witness is made by the
counsel for the city, it follows that we must make our cross-examination consecutively with it, which cross-examination would also naturally fall inside the defendant's time. I merely make the statement so that as your Honor sees fit to allow it, it may be clear that it is not with the acquiescence of the counsel for the complainant.

Mr. BURR: That statement is not strictly in accord with the facts, if your Honor please, because I am entitled to examine this witness very fully. When it is brought to your mind that the injunction which now exists restraining the State and the City was granted largely upon the affidavits and statements contained in the affidavits made by this gentleman, I am entitled to find out from him here and now the sources of his knowledge upon which he bases his positive statements which were presented to Mr. Justice Lacombe, and I have not traversed outside the regular and ordinary line of cross-examination, in a case involving such a momentous question as is involved in this one. And more than that, I have been hampered, as I have called to your Honor's attention several times, by the refusal of counsel on the other side to afford the facility that the examination of the books or the production of the various books would have given me. They protested before High Heaven and the Federal Court that they had nothing to conceal, and would throw open all of their books to the City and to the State, and the moment we ask for their production, they refuse, and we are told that we must proceed according to legal procedure if we want any testimony
or evidence from them. And I have been endeavoring under
231 those circumstances, so circumscribed, to get all the knowledge I possibly could from Mr. Bradley now. And I want to say in passing that I will not be able to finish with Mr. Bradley, and I merely suspend my examination of him when I do suspend, until we have come to some understanding or have taken some action with regard to the production of the books to which he has made so frequent reference.

Mr. MATHEWSON: You will remember that you stated yesterday, Mr. Burr, that you were examining upon new matter and were making the witness your own witness. When the question arises as to the suspension, I suppose it can be met; but these protestations that you say have been made, I do not think you will find on any record. We shall observe all that we make.

The MASTER: I do not think further discussion is necessary. It seems to me, as regards the question of cross-examination outside the lines of the direct, that you are sufficiently protected, Mr. Mathewson, by your objection that you took at the time, and by your present statement. And if it should transpire later that you are suffering any hardship by reason of the shortening of your time,

that can be made the subject of some appropriate application. We can tell better about that later.

Mr. MATHEWSON: I do not wish to object to each question, of course, but I desire, if you will permit it, to have it stand as a general objection to a cross-examination which is not properly cross-examination, without raising it as to each question.

The MASTER: Regarding the question of the books, I notice by the record yesterday that it appears that a request was made
232 of me to make some direction to the production of those books. I did not so understand that at the time. I understood Senator Page's request to be made to Mr. Mathewson.

Mr. PAGE: I tried to point out that it was made to you, sir, and asked the stenographer to read it.

The MASTER: I did not appreciate that a request had been made of me for any ruling upon the subject. With regard to that, I can simply say that I am prepared to entertain an application in the proper manner for the production of any books or papers material to the issue that counsel desire to have. It is to a certain extent a question of the order of proof. If it is desired to use those books and papers now for the cross-examination of the witness on the stand, of course the ordinary order of proof would have to be somewhat interrupted. Before I should direct the production of any such books or papers I should require it to be made, either by this witness or by some other witness, clear, exactly what books and papers are required. Such a demand as was made here yesterday, a wholesale demand for the production for contracts, books and papers covering a period of years is of course unreasonable and out of the question, and it cannot be permitted at all. But it is quite proper that if the counsel desire to see the books of the company showing for instance the amount expended for certain purposes at a certain plant that, subject to such proper regulations as will protect the company from a fishing excursion, those books should be produced here under the direction of the Master and should be used for cross-examination.

233 Mr. BURR: May I make a suggestion in that connection, Mr. Master? It would facilitate, it seems to me, the orderly progress of this hearing and bring about a quicker conclusion; it was done in the Stevens Investigating Committee, and done, I believe before the Gas Commission, and it was done in the hearings before the State Commission at Massachusetts, where an inspection of the property was allowed by well known experts so they could testify—if there is nothing to conceal, we have a right to look at these properties which Mr. Bradley has testified regarding and about the value of which he could not make up his own mind, unless he had made a very thorough examination, and he has testified yesterday, that no other man could unless he made a thorough examination—why should we not be permitted, in behalf of the State and City, to go with our experts along with their experts, and view this property, so that when the time comes they may be prepared to state what their opinion is as to the value. The same way as to the books, if we want to have some accountant to examine them, why should we not be

permitted to leave them here with you at the convenience and comfort of the complainant, so we may make such examination as may be necessary?

The MASTER: Well, that is a matter of stipulation and agreement between counsel. I am not aware that the equity rules provide any method for my authorizing an inspection of the plant. I assume with regard to all these matters that counsel can, by waiving technicalities, upon both sides, and being mutually accommodating, save much time. And I dare say that on either side counsel would
234 be met in the same spirit that they show themselves to the other side.

Mr. BURR: If we have to compel them to give their proof in legal form and technically and they compel us to do the same, it cannot be done in ninety days nor in six months.

Mr. MATHEWSON: We understood you wanted us to prove it in legal form and not use the testimony which has already been taken and which Judge Lacombe suggested might be adopted. I do not wish to take time in this discussion, but I will say here that I will talk the subject over with Mr. Burr and this material that he wants, and I think we can arrive at some understanding. We were able to before the Commission, and before the Commission considerable time was spent by my learned friend Senator Page and his associates in getting the detailed books, and they verified them and checked them up and they virtually came to the conclusion that the only way to do was to get the summary papers and prepare general statements which were checked in one detail and another to test them, and that that disposed of the subject absolutely. There is no question as to how much we have paid out in connection with our gas manufacturing business at all. It can be stated and is stated in a large number of classifications, and the simple question remaining before the Commission was whether some of these items ought to go into the cost of gas production. I do not think it is a question at all of special details or doubtful payments, I mean the question as to whether payments have been made of money or what property we have. The question is a broad question, much broader, and if we proceeded in this technical way to produce one memorandum
235 after another, accumulating thousands perhaps, and finally reaching a result which has been transcribed by labor of the company already upon its books in total, we never would, as Mr. Burr has said, get anywhere in any reasonable time. It would take us months or years to do it. I will confer with Mr. Burr. I have already conferred a moment with Senator Page and Mr. Gans as to their request and I believe we can make certain suggestions that will virtually meet with their approval. At any rate, I will endeavor to do so, as to the books. As to the plants, that is something I cannot speak of at this time.

Mr. BURR: While we are on this subject, I spoke to Mr. Garver the other day in regard to experts on the real estate. He proposes to give evidence, naturally, as to the value of this real estate. I suggested that he might permit our experts to view the real estate with

theirs, and be prepared to reply to the testimony that will be given by his experts.

Mr. MATHEWSON: That is a subject over which I suppose the Master has no jurisdiction.

Mr. BURR: Of course the question as to what constitutes the actual cost of manufacture and distribution of gas is a question of infinite detail and cannot be summarized.

Mr. PAGE: I think a good deal of this trouble that we are now apparently laboring under will be shortly eliminated. The request was made pursuant to the ruling made by Mr. Justice Lacombe upon us *was* that we should stipulate that any portion of the record that had been produced before the Gas Commission might be read in evidence here, and subject to the right of producing witnesses for further cross-examination. We replied that as to that we
236 could not consent, and that seemed to have excited the counsel for the complainant to the extent that they were going to stand on the absolute demand that everything be done here entirely under the rules and nothing more would be produced or given than that the absolute rules of law required. When we were met in that spirit, of course, it was the only spirit we could act in, and that might explain some of our objections that might not otherwise have been made. But I think when the little irritation which was occasioned by the first refusal has worn off, that we will arrive at a satisfactory method of procedure.

The MASTER: Let us trust so. Can we go on now with Mr. Bradley?

By Mr. BURR:

Q. Are you a director in the Astoria Light, Heat and Power Company?

A. Yes, sir.

Q. Are you a director in the Consolidated Gas Company?

A. No, sir.

Q. Outside of Mr. Gawtry and Mr. Crimmins, did you discuss the purchase of the Astoria plant with any other director of officer of the company?

Mr. MATHEWSON: Mr. Master, is this really valuable at all? The question is, if we have the Astoria plant, what is our expenditure and is it extravagant. There it is and it is bought. It does not seem to me material as to whom the purchase of this plant or property was discussed with, and points of that kind. I do not wish to seem discourteous to my friend on my left, but it does seem to me that we are using up time on things which do not touch the point.

Mr. BURR: The question is under the conditions which have been revealed here whether the purchase of this plant and pro-
237 posed construction of this plant was a wise or unwise move or a necessary move, because all that they can have passed upon here is the property which is actually and necessarily used for the manufacture and distribution of gas. And if this whole plant, this immense plant which has been planned in Astoria and upon which so much money of this company is to be spent is an unwise

investment and is an unnecessary investment, it is quite material to the conclusion to be arrived at.

The MASTER: Very possibly, but how do you get at that by showing to what extent it was discussed back and forth by the officers of the company?

Mr. BURR: If it was not discussed at all, but was done haphazard, certainly it could not be called a wise corporate move. If it was done after careful consideration by the directors, and consultation with their chief engineer, it might show that they gave great attention to the possibilities of it.

The MASTER: Suppose they discussed it a month; if it was improvident, it would be none the less improvident by reason of that discussion.

Mr. BURR: This being cross-examination, I want to show——

The MASTER: I am not disposed to curtail the examination, but it does not seem to me it will be of great assistance to me in reaching a conclusion. I see your point as to the Astoria plant, and of course that is an open question on which there is a great deal to be said, but I do not myself at this moment, see exactly how I am to be facilitated by going into this question, for instance, of the discussions between the directors or the questions you were asking this morning
238 about the reports made by Mr. Bradley. I do not feel inclined to cut it off, but simply throw out the suggestion that it seems to be going rather far afield.

Mr. BURR: I will ask that one question and finish with it.

Q. (Question repeated as follows: Outside of Mr. Gawtry and Mr. Crimmins, did you discuss the purchase of the Astoria plant with any other director or officer of the company?), and if so, with whom?

A. I cannot say definitely now that I did discuss the question with any of the directors. I met individual members of the directors often in the past and have talked with them generally on the subject of gas manufacture, etc., but as for any absolute detailed conversation or discussion on that subject, I don't know that I can now recall it.

Q. I have only reference to the time you spoke of when you went over there with Mr. Gawtry and Mr. Crimmins; I refer to that time. Did you then discuss the matter with any other directors of the company, and if so, whom ?

A. Not at that time, because so far as my memory serves me there was no one else with us.

Q. Well, not on that occasion, but I mean about that time?

A. I never meet with the directors and what discussions were had in the board of directors I cannot say; I can only speak personally as to what I did.

Q. I am not asking for the other.

A. And not having any direct communication with the Board of Directors as a Board of Directors—I may have talked with individual members in ordinary conversation and do not recall it, you know.

Q. You do not recall it?

A. No, sir.

Q. The total production of gas is 36,000,000 cubic feet a day, is it not?

A. Of the Consolidated Company? I cannot answer that
239 without having the figures.

Mr. MATHEWSON: Do you mean the average per day?

Mr. BURR: Yes, the average.

Mr. MATTHEWSON: Or the average per day throughout the year.

Q. You testified to that, didn't you?

A. Something to that effect, I don't remember now what it was, I don't know what it was.

Q. And the capacity of the companies of the Consolidated is 51,000,000 cubic feet a day?

A. Fifty-one million.

Q. And the capacity of the other companies is sixty-one million cubic feet a day?

A. The figures that I gave this morning were 62,078,000. In the case of the Central Union that I gave there as nine million and something, you will remember I said I thought there was an error. That should be 7,500,000, which is correct. I have refreshed my memory since by looking at the affidavit of the engineer of the company and found that it was 7,500,000 instead of nine million and something.

By Mr. MATHEWSON:

Q. That would make the total about 60,000,000 instead of 62,000,000, wouldn't it? You had 9,500,000 for the Central Union and it is 7,500,000.

A. That is correct.

By Mr. BURR:

Q. Then the total output or capacity would be how much?

A. Approximately 60,000,000 cubic feet. I don't like to make mistakes, but you will remember I was a little undecided this morning when I testified.

240 Q. Making a total output of 111,000,000 cubic feet of gas per day?

A. About.

Q. And the utmost required is 36,000,000 per day?

A. Oh, no, in the winter season we send out nearly 100,000,000 now—last year.

Q. Well, you have the Northern Union lying idle?

A. Yes.

Q. Capable of producing nearly one million feet per day?

A. About three-quarter million.

Q. Between three-quarter million and a million you testified?

A. Well, the actual amount is between 750,000 and 778,000.

Q. That is lying idle?

A. Yes.

Q. And lying idle because not needed?

A. Because it is not needed just now; it is a reserve plant that would have to be used.

Q. And the Astoria plant contemplates an output of 240,000,000 cubic feet a day, does it not?

A. No, sir.

Q. How much?

A. 20,000,000.

Q. I am referring to the twelve units?

A. Oh, that may be in the next twenty-five years.

Q. I have asked you the question. I say it is contemplated and provided in your plan for the construction of the Astoria works to provide for a capacity capable of making 240,000,000 cubic feet of gas a day?

A. That is the ultimate capacity, but there has been no money spent——

Q. That is the capacity on which you are now figuring?

A. But there has been no money spent on that capacity—anything beyond the present 20,000,000, with the exception of the purchase of the land.

Q. Then the land was taken into consideration in the desire to produce 240,000,000 cubic feet a day?

A. The entire tract was purchased.

Q. How many acres does each unit occupy?

241 A. I don't know, I can't answer that without measuring up and figuring.

Q. About how many?

A. Well, there are 367 acres, I think Mr. Francklyn testified the other day, and about less than one-twelfth of that will give the acreage—one-fifteenth perhaps would give the acreage of one plant.

Q. I did not catch what you said.

A. I said take the 367 acres, if that is the correct amount, and dividing it by 12 gives the acreage for one plant less other vacant property that is left.

Q. Would you say that you would require more than four acres for one unit?

A. Yes, in that case.

Q. I am not speaking in that way. I want you to say positively from your experience and knowledge of the plant and your knowledge and experience as chief engineer, will it require more than four or five acres to accommodate each unit which is contemplated to be built on the Astoria ground?

A. I suppose a plant can be built on four or five acres; it is a question whether it would be properly disposed of.

Q. How many acres does the present unit occupy?

A. That is what I say, divide the present acreage by 12. If 367 are the whole 12 plants, it is one-twelfth of 367, isn't it?

Q. Then you figure because 367 acres have been purchased that the twelve units will occupy 367 acres?

A. With other things there composing component parts of a gas plant.

Q. That is what I want to find out from you. How many acres will each unit occupy?

A. I have never made the computation.

Q. Have you got the dimensions of the present units?
A. No, sir, not in detail, I have not.
Q. Could you give it roughly?
A. The present unit occupies a strip of land approximately 2,000 feet long by perhaps 350 feet wide.

Q. That would be about 12 acres, would it not, Mr. Bradley, for each unit?

242 A. Possibly; I don't know, I never made the calculation.

Q. Isn't it a fact that about half, more than one-half of the acreage that is purchased over in Astoria is unnecessary for the purposes for which it was purchased?
A. No, sir.
Q. Well, now, will you give us your reason for saying no, sir?
A. Because in my judgment as an engineer it is not. That I consider a very good reason.
Q. And that is the best answer you can give as to that?
A. Yes, sir.
Q. You have agreed to produce the dimensions of the plants in the city here?
A. No, sir.
Q. I understood you to say that you would furnish us with the dimensions of those plants.

Mr. MATHEWSON: You asked the dimensions of the holders.
The WITNESS: You asked the dimensions and capacities of the holders, but not the plants, I have not been asked for them.

Q. You can furnish all that information; you can do that, Mr. Bradley?
A. I shall have to consult counsel on that, with due respect to you.
Q. I will always assume you will not go contrary to the advice of counsel, but if counsel allow you to do so and you have the means of furnishing that information, will you do so?
A. If advised by counsel.
Q. And if advised by counsel and you have the means of doing so you will furnish us with the same information regarding the Astoria plant and holders?
A. That is the dimensions?
Q. And space occupied?
A. May I ask a question?
Q. Yes.
A. Do you want that in the shape of drawings or in the shape of a written description?

243 Q. Drawings.

A. Drawings I should prefer to furnish if obliged to, because they are more easy to get up.

Q. How many miles of pipe are you laying from the Astoria plant?
A. We have laid approximately three miles.
Q. Is that sixty-inch, five-foot mains?
A. Yes, sir.
Q. And that connects with the tunnel, does it, at the New Amsterdam works?

A. Yes, sir.

Q. And then do you lay further mains to continue from those works?

A. Not at present.

Q. But you contemplate making a continuation of those mains through the tunnel, do you not?

A. Yes, sir.

Q. How long will those mains be, what is the size of them—the same, sixty inches?

A. The present tunnel you speak of now?

Q. Yes.

A. Not the contemplated tunnel?

Q. The present and the contemplated tunnel.

A. The present tunnel is about 2,750 feet long, I believe. You know, Mr. Burr, I am carrying all these figures in my head and it is rather awkward for me.

Q. That shows the advisability of having the books, doesn't it?

A. And I want to — absolutely surely of what I am talking about. I think it is 1,750 feet long; it contains now two 36-inch mains.

Q. Those are the largest mains in the United States, are they not—supposed to be?

A. No, they are not so large as our 60-inch.

Q. I am speaking now of the 60. Those mains are the largest that have up to the present time been laid for gas purposes in the United States?

A. So far as I know.

Q. Is there anything, from an engineering standpoint, to prevent you from connecting, say the plant of the Northern Union Gas Company by means of mains 60 inches along the marginal streets
244 of the City of New York, to connect with your other mains?

A. In connection with what works?

Q. Say the Northern Union works?

A. Oh, the Northern Union?

Q. Yes.

A. There is no special difficulty in the way up in the Northern Union territory, so far as I know, of laying a 60 inch main, with the exception that it is almost all entirely rock blasting work and very expensive.

Q. Could not a 60 inch main be laid around the City of New York and the marginal streets, all around, for one quarter of the amount of money that is contemplated to be expended at the Astoria plant?

A. Oh, no; no, sir. I don't think there is a place in the world where it is so expensive to lay pipes as it is in New York.

Q. If such a pipe could be laid it would obviate the variation in pressure, wouldn't it?

A. No, sir.

Q. Do you know what is the cost to lay the mains there of this pipe we are speaking of?

A. I know—I say I know from what has been told me, but I don't think you care to hear it, because you would ask me at once if I made the figures, and I did not.

Q. Well, of course the cost of those mains appears upon the books of the company?

A. They do; yes, sir.

Mr. BURR: I think that is all I want to ask Mr. Bradley at this time; and I want to reserve the right to move again at the proper time to strike out his testimony with regard to the repairs and replacements, on the grounds already stated.

Cross-examination by Mr. PAGE:

Q. You state in your examination that a large holder was
245 more economical than a small holder. Will you give us the reasons why?

A. Yes, sir, I should be very glad of an opportunity to explain that because I was rather upset at that time somehow or other, and it did not occur to me. Take for illustration two circles—take a small holder 100 feet in diameter, and another of 200 feet in diameter, the holding capacity of the holder increases for times. Take a circle of a given diameter and a circle of another diameter, one of double diameter will hold four times the quantity; it increases as the square of the diameter; that is to say, if you take one holder of 100 feet in diameter the circumference of the tank of that holder will be 314 feet, four times 314 will be 1256; one holder of 200 feet in diameter the circumference is 628 feet, that is 628 feet the tank to be built for that 200 foot holder, with a 1200 tank, lineal feet of tank to be built on four small holders. The four small holders built in that way with double the quantity of tank surface will hold about 2,000,000 feet; the large holder will hold 5,000,000 feet, and occupy the same ground space, therefore it is much more economical to build large holders than small ones; for those reasons the cost of construction is the chief thing and the ground space occupied.

Q. I suppose the more lifts a holder has also makes it more economical?

A. With the large holder there are five, and with the small holders it is impossible to put more than two or three on on account of the disproportion between the diameter and the height.

Q. The more expensive part of the gasholder is really the tank?

A. The tank, in some cases.

Q. That is where you build a masonry tank?

A. Yes.

Q. The holder at 132d Street that you testified to as having been recently completed and put in operation, is that to take the
246 place of some old holders abandoned?

A. No, sir, that is to supply the increased consumption in the upper part of the city, making it practical to send out gas there without carrying so much pressure.

Q. On page 174 of the record you gave certain reasons why the manufacture of gas at Astoria would be more economical than in Manhattan. Are those the only reasons?

A. Will you read them, please, I don't recall them now, or let me read them.

Q. You stated that the method is more expensive to manufacture

gas in New York, on account of the fixed charges and the troubles and difficulties with the Board of Health and the Building Department and with the city bureaus. Then you were asked: "You think that when you get over to Astoria you will be free from the observation of those departments? A. I do not think that we will be free from observation, but we will probably be free from a good many of the annoyances which are real annoyances now, but they will not be noticed over there. Q. What reason have you for making that statement? A. If for instance we take a gas plant in a crowded residential locality, surrounded entirely by dwelling houses, and there is a little smoke or a little smell or a little noise emanates from the gas works, the Board of Health are after us at once. Over there we are in open country, out of the way, with nobody to bother us and nobody to annoy us."

Mr. MATTHEWSON: He said nobody to be annoyed.

The WITNESS: Nobody to be annoyed, I should have said. We are not annoyed, we annoy other people. May I now have the question read?

Q. (Question repeated by stenographer as follows:) On page 174 of the record you gave certain reasons why the manufacture
247 of gas at Astoria would be more economical than in Manhattan. Are those the only reasons?

A. I don't know whether those are the only reasons. Every one of the reasons given is a source of expense, any expense that can be saved is a consequent reduction in the cost of operation and making gas and running the works.

Q. Well, the concentration of the works in a large plant would also eliminate the question of superintendence, wouldn't it?

A. That will probably be an ultimate source of reduction in the cost of manufacturing gas when the plant reaches such a size that it can be called concentration.

Q. And the method of construction of your Astoria plant enables you to do a great deal more work by machinery which in other plants you have to do by hand?

A. I have endeavored, in the designing of the Astoria plant, to put in everything that in my judgment would be advantageous to bring about a decreased cost of gas. There is some machinery put there that is not in any of the other plants; some will be in there that is not in any other plant in this country, and my endeavor has been to build an up-to-date plant and the best plant possible to be produced.

Q. Have you made any computations as to what saving will be made in the manufacture of gas at Astoria by these present methods?

A. Nothing except in the way of general estimates, nothing that I would be willing to say, or that I would say absolutely I knew would be the result.

Q. Did you make such an estimate for the officers of the company at that time?

A. No, I have not; I have never been asked for it.

Q. Did you make any estimate which you put in writing as to that?

A. No, sir.

Q. It has just been your mental calculation?

A. Yes, except that sitting at my desk I might have made
248 a memorandum that was afterwards torn up; nothing that I made for any preservation.

Q. You made some statement, did you not, to the Joint Committee of Senate and Assembly, as to what you expected to save over there per thousand?

A. Yes, I believe there was something in the testimony there.

Q. Do you recall what that was?

A. I said, I believed that the gas was costing, as I recall the testimony now, in the neighborhood of 35 cents, but that by various economies, I might save four or five cents on that; that is as near as I can recall it at this moment; saying at the time that it was the merest approximation, and that I had no knowledge as to what the absolute result would be.

Q. Did the figures that you gave the other day, as to repairs and replacements, include repairs and replacements to holders, or manufacturing plants?

A. Yes, sir.

Q. It included also holders?

A. Yes.

Q. You have stated that the consumption of gas in the summer is reduced about 60 per cent. from the consumption of gas in the winter?

A. That is the general average.

Q. Do your expenses continue at the same rate in the summer as they do in winter?

A. No, sir, but they are proportionately higher in the summer than in the winter; not in that ratio, but they are a little higher in the summer than in the winter.

By Mr. MATHEWSON:

Q. Per thousand feet?

A. Per thousand feet; I am speaking entirely of per thousand feet he asked the question as to the quantity of gas made.

249 By Mr. PAGE:

Q. What expenses do fall in the summer?

A. Chiefly the labor.

Q. Now, in estimating the capacity of a plant, you say you multiply the daily capacity by 200?

A. Yes, that is the annual capacity.

Q. Yes, to get the annual capacity you take the daily capacity, full capacity, and multiply that by 200?

A. Yes, sir.

Q. I believe you stated that that was caused by the reduced demand in the summer time for gas?

A. Yes, sir.

Q. Now, if you were given a condition where there is a demand

for the entire product of the plant the year round, that estimate would not be a proper estimate as to capacity, would it?

A. I do not think I grasp that entire question.

Q. Given a condition that there is a demand for the entire capacity of the plant during the summer, I say then you would not estimate the same way?

A. If the plant made its capacity for 365 days in the year, then it would be a proper thing to multiply the daily capacity by 365.

Q. And there is no reason, except the falling off of the demand in the summer time, for your not being operated to your full capacity, the plant?

A. Yes, the reason is because all things wear out, and we must have opportunity to lay off our plant, our apparatus, at times, to effect those repairs and replacements.

Q. Now, how much time would you estimate was necessary for the discontinuance of a plant for the purpose of making repairs and replacements?

A. I should not attempt to estimate that at all without I saw the plant and knew the condition it was in and knew what was to be done, I could not do that.

Q. I am talking about the plants that are operated by the
250 Consolidated Gas Company?

A. One year it might take a plant laid off for six months, another year all the repairs might be accomplished in three months, and another year it might take even longer. That is a thing that I cannot form any opinion on whatever. It is entirely too broad a question. You might as well ask me how much repairs are going to be necessary on a certain plant next year, and that I cannot say.

Q. I am speaking of your experience in operating these plants of the Consolidated Gas Company for the last twenty-two years, eliminating the lack of demand in the summer time?

A. I shall have to say, in answer to that question, that all my experience, and all the experience of any other gas engineer that I ever knew, would not enable me to answer that question.

Q. Can you not now make all the repairs necessary to this plant in the summer time, and still continue to meet the demands for summer business?

A. Which plant?

Q. I am speaking of the plants of the Consolidated Gas Company.

A. Well, yes; that is what we are doing.

Q. And at no time do you shut down an entire manufacturing plant to make repairs, do you?

A. No, except some repairs that become necessary that make it necessary to shut down.

Q. Then, in your experience during the past twenty-two years you have never shut down any one of your plants entirely, have you?

A. They have been shut down at various times for a short time, for a day or two days, when such repairs as were necessary as were impossible to make otherwise, were made. I think I see what you mean, if I might make a little statement along that line: It is in

my opinion more expensive to shut a plant down than it is
251 to keep it running, for the reason that we use a great many skilled men, mechanics, men whom we are obliged to keep, and when the works are shut down and are producing nothing we have to keep those men, and it is an item of running expense with nothing produced to compensate for it. It is more expensive to absolutely shut a plant down than it is to run it at short capacity.

Q. Can you give the percentage of labor that is laid off during the summer?

A. The percentage of labor laid off during the summer might run perhaps from 20 per cent. to 30 per cent., but it is almost entirely among the cheaper laboring class of people, not the mechanics or the skilled men; those we retain and use them for our repairs and in our work.

Q. Did you refer, then, by percentage, to the percentage of the number of laborers employed or the percentage of the expense?

A. The number of men employed.

Q. Could you tell what that would be in percentage of expense for labor?

A. No, not offhand.

Mr. PAGE: I will reserve any further cross-examination of Mr. Bradley, as indicated.

The MASTER: Have you anything, Mr. Gans?

Mr. GANS: No, I think not.

Redirect examination by Mr. MATHEWSON:

Q. You stated the other day from recollection that the total cost of the items which you had in mind representing this first unit, including land and tunnel, amounted to about thirteen million dollars, deducting land and tunnel, to about $9,217,441.42?

A. That is correct.

Q. The latter amount, being a reduction made from the thirteen million, being represented by the amount of land and tunnel?

A. Yes.

252 Q. Are you able to say now whether that $9,217,441.42 represents the exact amount of the items that you had in mind, or how closely it represents it?

A. It is not the exact amount.

Q. How close is it?

A. Maybe within one hundred thousand dollars.

Q. Let me ask you whether in building this tunnel under the river, with the capacity which you have stated, it would in your judgment be business prudence, under the circumstances, to have built a smaller tunnel?

A. I should consider that I had forfeited my reputation as an engineer if I did.

Q. Is it possible to enlarge a tunnel when once constructed?

A. It is very difficult, and in the case of a tunnel containing gas pipes, very dangerous to do so. If it required enlargement it would probably mean the construction of a new tunnel rather than an enlargement.

Q. In this item of $9,217,441.42 did you include any gas main, even one main through the tunnel?

A. No, sir, I did not.

Q. Your first main would be a matter of quite large expense, would it not?

A. Yes, sir.

Q. Did you include the entire holder capacity, or simply one holder and a tank?

A. The one holder and two tanks.

Q. Then to complete the holder capacity to the capacity of your first unit, you would require the construction of a second holder in that tank, would you?

A. A second holder must be put into that tank.

Q. That would involve a large expense additional?

A. That would require an additional expense of $750,000.00, if my recollection is right.

Q. Did you include any office building in that $9,217,441.42?

A. No, sir.

Q. Taking those items which I have mentioned, and which you say are not included in the $9,217,441.42 to complete the
253 first unit, would you say that one million dollars was an excessive allowance for that?

Mr. GANS: I think we will object to that, if Your Honor please, on this ground, that as we understand it, the contracts have been made.

Mr. MATHEWSON: No, these are additional.

Mr. GANS: I understood that the contract had been made.

Mr. MATHEWSON: No, these are additional contracts which were not included in the $9,217,441.42 at all. Is that right, Mr. Bradley?

A. The $9,217,441.42 represented what had been under contract or completed. There are other things, this holder and the office, and various other things which Mr. Mathewson speaks of that are not under contract, nor I might say, laid out yet.

Q. But they are requisite, are they not, to the completion of the first unit?

A. They are.

Q. I will repeat the question, whether a million dollars additional for those items would be excessive?

A. No, sir.

Q. So, that the total cost of the first unit, excluding land and tunnel entirely, would amount then, according to your estimate, when completed, to over ten million dollars?

A. About $10,800,000, if I remember the figures.

Q. Will there be more grading and filling in connection with those structures at Astoria?

A. Yes, grading and filling is going on there now, and more in prospect.

Q. Did you inspect or examine any other pieces of land around the City of New York before this Astoria purchase, with a view to its availability?

A. Several.

Q. Were you able to find any as available as this?

A. No.

254 Q. Has the company ever received complaints from neighboring residents of the city in respect to the plants now in operation in New York?

Mr. GANS: I object to that as incompetent, irrelevant and immaterial.

Mr. BURR: The same objection.

Mr. MATHEWSON: You have asked him these very questions, why he thought of moving to Astoria.

Mr. BURR: No, he volunteered that statement.

Mr. PAGE: He volunteered that statement on direct-examination, and I asked him if there were any other reasons which he wished to give.

The MASTER: I do not see that it is very material.

Mr. MATHEWSON: I do not see that it is myself.

Mr. BURR: That was a most marvelous explanation he gave, that it was to escape the persecutions of the city departments.

Mr. MATHEWSON: No, I think if we proposed to put any further manufacturing plants up in the city of New York, there would be a much greater cry.

Mr. BURR: The only reason for Astoria was that they were going to move their present gas plant over there.

The WITNESS: We are trying to.

Q. Considering the extent of this plant, and the character of a gas plant, and the character of the City of New York and its structures about the land which the Consolidated Gas Company owns in the City of New York, would you consider it feasible or practicable to construct a great gas plant in the City of New York in addition to those you now have, I mean on Manhattan?

255 Mr. GANS: I object to that on the ground that it is too vague. Would it be feasible to construct a great gas plant in the City of New York? That is about as vague a proposition as I ever heard put to a witness, with all due respect to Mr. Mathewson.

The MASTER: Perhaps Mr. Mathewson will withdraw the "great." I will let him answer it.

Exception taken by Mr. Gans.

A. As an engineering proposition I should dislike very much to recommend to our directors, or be on record as having recommended, the erection of a gas plant in any part of the City of New York on Manhattan Island.

Q. Would you have the same opportunity for extension in Manhattan, of additional units, that you have at Astoria?

A. No; one of the great difficulties in building gas plants or any manufacturing concern on Manhattan Island is the fact that we are limited by the size of the blocks. The blocks on Manhattan Island are only 200 feet wide, and we cannot get on the gasholders of modern construction, or the buildings that go with them, without closing streets, and that we are not permitted to do.

Q. Have you any marginal street in Astoria between your plant and the water?

A. No, sir.

Q. What effect have the marginal streets in New York, between any plants that you have constructed or might construct, upon the desirability of constructing a plant here, as compared with Astoria?

A. It is conceded that the only proper place to construct a gas plant is, in the case of water facilities, where you can receive supplies by water. Of course I do not refer now to the back country where there is no water, but where water facilities are available it is conceded that that is the proper place to construct a gas plant.

256 Mr. BURR: I ask to have that answer stricken out unless the witness testifies by whom it is conceded. It cannot be a concession binding on the defendants.

A. (Continuing:) Then I would say it is my opinion, and in that opinion I am borne out by everybody. The construction of this marginal street around the city has had the effect of cutting us off absolutely from our water front facilities, making it necessary to cart at increased expense all of our coal and all of our materials that come by water, increasing the cost of manufacture by increasing the cost of materials.

Q. When you say that the field work now in process of erection at Astoria was begun two months ago, what do you mean?

A. That is a technical term which perhaps I should not have used. Field work is known in distinction from shop work; the materials have all been gotten out in the shop and sent to the place for erection and the erection is commenced; that is what we call field work.

Q. In other words, the holder is constructed?

A. Is being constructed.

Q. And the work of construction began long ago, didn't it?

A. The shop work, the procuring of the material and getting it out into shape, getting it ready for erection, was commenced two years ago in the shop.

Q. You have stated that you testified before the Stevens Committee, or made an estimate, that the cost of gas at Astoria might be perhaps five cents less than the cost of gas as manufactured by the company in Manhattan?

A. Yes, sir.

Q. Was that comparison for the year 1904, do you remember?

A. The year previous to the Stevens Commission.

Q. The investigation of that was in April, 1905?

257 A. In 1905; then that was in comparison with 1904.

Q. Had you in mind at that time the requirement of two additional candle power?

A. No, sir, that requirement was not imposed upon us until afterwards.

Mr. GANS: I think we will move to strike out the answer of the witness as a conclusion of law. I believe the requirement was imposed before that time, and the conclusion is wrong.

Mr. MATHEWSON: No penalty was imposed except for anything lower than 20 candle power.

Mr. GANS: May that be stricken out?

The MASTER: I will let it stand. His understanding of the law does not do any harm.

Exception taken by Mr. Gans.

Q. Prior to the passage of the recent act passing or imposing 22 candle power on the company, what candle power as a minimum was maintained or attempted to be maintained by the Consolidated Gas Company, according to city tests, at least a mile from the works?

Mr. GANS: I do not wish to be over technical, but I will object to the form of that question because it involves that conclusion of law. If he will mention the act and say, "Prior to the passage of the last act what candle power was in fact maintained by the company?" that will obviate the difference.

Mr. MATHEWSON: That is almost my question word for word. Is there any objection to his answering that question?

A. Twenty.

The MASTER: He says twenty.

Exception taken by Mr. Gans.

258 Q. What candle power is the company now maintaining or has it maintained since July 1st last?

A. A minimum of 22.

Q. When you spoke of the cost to the Consolidated Gas Company of gas in 1904 as being about 35 cents, and possibly being reduced 5 cents at Astoria, did you mean holder cost or cost of production, as it is called, including only labor and material?

A. Cost of production.

Q. How much would holder cost be beyond the cost of production, adding the items of repairs, etc., that come in between?

A. That is something that is entirely variable and very seldom comes to my notice. If I want to get any figures of that kind I go to the accounting department and get them. I do not ordinarily use them in my own business or practice.

Q. The cost in the holder is somewhat larger than the cost of production, is it not?

A. Yes.

Q. Assuming that the cost to the Consolidated Gas Company in 1905, based on 20 candle power, was about five cents less than in 1904, would you undertake to say that at Astoria you can make any reduction below the cost in 1905?

A. No, sir, I have already made it.

Mr. BURR: The statement or the reduction?

A. (Continuing:) No, I have already made it by actually producing gas at less cost, made the reduction that I contemplated making in Astoria; made it in New York.

Q. The greater part of the gas produced in New York City is water gas, is it not?

A. Yes, sir.

Q. And what effect, as to the cost of gas, will this extra two candle power have?

A. I believe at least three cents, one and one-half cents per candle power.

259 Q. In reference to the quality of oil which the company uses, is it necessary to use as high a grade of oil in the summer, to maintain the illuminating power, as it is in the winter?

A. No, sir.

Q. Did the raising of the candle power by two candles make any difference in the quality of oil which you require in winter for the purpose of maintaining that candle power?

A. We had to use a higher grade of oil to maintain the required legal candle power.

Q. Would there be any difference on the score of cost of oil between a mild winter, such as last winter, and a severe winter?

A. We would be required to use more in a severe winter than we would in a mild winter; in fact we were caught last winter once by the temperature dropping down twenty or twenty-five degrees over night; and we got way below twenty-two.

Q. Last winter was a mild winter, was it not?

A. Yes, it was a mild winter with the exception of an occasional cold snap which kept us busy.

Q. When you said you did not think the saturation point in the City of New York had been reached in the sale of gas, will you explain more fully what you had in mind?

A. Because I do not think that the City of New York has ceased growth.

Q. Do you disagree with the conclusion of Dr. Humphreys, as quoted to you, that the *per capita* consumption has been virtually reached, the maximum *per capita* consumption of gas has been reached in the City of New York?

A. Yes, entirely so.

Q. I asked you whether you disagreed with that?

A. Oh, no; I agree with him entirely.

Q. Then your expectations as to the output of gas depend upon increase in the population?

A. On future growth, yes.

260 Q. May I ask further whether your estimate as to future increase depends on the increased use of gas as an illuminant or as fuel largely?

A. The great increase in the future will be as fuel, rather than as an illuminant.

Q. Is it possible for you to estimate what the rate per cent. of increase in New York will be for gas sales?

A. Not with absolute accuracy. I should say that we might expect and believe that we should expect not less than 2½ or 3 per cent. steady increase per annum.

Q. You do not expect an 8 or 10 per cent. increase with electricity in use?

A. Oh, no; in the old days of lighting when gas was used exclusively for lighting, a 10 per cent. increase was not abnormal.

Q. Was your statement of replacement in the plants and holders brought down to June 30, 1906, or to October 31, 1905, if you remember?

A. October 31, 1905.

Mr. BURR: May I inquire what book it is you are referring to now.

The WITNESS: It is not a book, it is a memorandum of the additions and replacements and repairs that we have had under consideration that I testified to.

Q. When you spoke of the increase of pressure being one-tenth of an inch for each 17 feet you said you referred to gas of what specific gravity?

A. Six-tenths, air being one; six-tenths of the weight of air.

Q. How does coal gas compare with that?

A. Coal gas is about 45/100.

Q. And would the increase be greater or less or would the number of feet elevation for an increase of one-tenth in the pressure, be more or less in the coal gas?

A. The lighter the specific gravity of the gas the more apparent increase there is in pressure by elevation.

261 Q. So that when the proportion of coal gas used by the completion of this first Astoria unit increases, the specific gravity of your entire gas taken as whole, would be less, would it not?

A. It would be less.

Q. And then the difference in pressure would be greater?

A. Yes, sir.

Q. For any given number of feet?

A. For any given elevation.

Mr. PAGE: May I ask a question just there.

Mr. MATHEWSON: Certainly.

By Mr. PAGE:

Q. Would that be coal gas at 20 candle-power, or coal gas not enriched, of that specific gravity?

A. I am speaking now of the gas sent out. It must be 22 or we could not send it out.

By Mr. MATHEWSON:

Q. Are the elevated points in New York City confined to one locality, or are they scattered over the city at one point and another?

A. There are differences in elevation all over the city.

Q. Would it be practicable from an engineering standpoint within any reasonable cost to run a separate trunk main to each distinct elevation?

A. No, sir.

Q. Quite aside from the question of increased pressure due to increased elevation, would it in your judgment be possible to maintain a pressure between two and a half inches and one inch and deliver gas to your customers throughout the city?

A. No, sir, it is absolutely impossible.

Q. What effect has the varying consumption of the consumers along your mains upon the pressure in the main?

A. There are cases where the variations caused by the con-
262 sumers without any change of pressure at the station has caused variations of half an inch in the mains.

Q. Is the pressure inside the house pipes as high as the pressure outside the house?

A. No, sir.

Q. Is it possible to have any single pressure which will operate equally well a Welsbach, which you said required at least two inches, and a flat flame burner which can be operated with one or less?

Mr. GANS: Objected to as immaterial and irrelevant. The question is not as to the wisdom of the legislation, but as to its practicability.

The MASTER: I will allow it.

Mr. GANS: I except.

A. No, sir.

Q. Speaking of the trunk mains, what is the condition of the streets in the City of New York, with respect to their capacity to carry more mains?

A. It has come to the point in New York City where it is almost impossible to lay mains of sufficient size, of the size that is demanded nowadays. Between the gas mains, the water mains, the telephone subways, the railway subways and all the sub-surface structures, the streets of New York are pretty well congested. The City of New York now is laying a most extensive system of high pressure salt water mains for fire purposes, and they are requiring us to move our mains in almost every street they go into, simply because they have not room to get in. We could not do that because we have not the power to make anybody move. We cannot find room to put large mains in the City of New York.

Q. If you started out to endeavor to equalize pressure so far as possible in different sections of the city, would there be any assurance that the rate of consumption in different parts of the city
263 would continue uniform?

A. No, sir. A district that we might try to strengthen up now, after a long time of main laying, and ripping pavement and getting mains in for the purpose, we would find perhaps when we got there that the centre of consumption had shifted to some other place, and our work was of very little value.

Mr. BURR: I ask to have that answer stricken out as being purely speculative.

The WITNESS: It is not speculative, sir, for I know the fact.

The MASTER: I will let it stand.

Mr. BURR: I except.

Q. Take a certain district on the East Side where the consumption showed the smallest increase in 1900 for the previous five years, was there such a district?

A. There was.

Q. What appeared in 1905 as to that district for the previous five years?

A. It was the point of largest increase

Q. Was there any way in which that difference could have been foreseen?

A. Absolutely no way to foresee that whatever.

Q. And if you had laid a trunk main in order to equalize so far as possible pressure in that district on the basis of consumption as it appeared in 1900, would it have met the purpose in 1905?

A. No, sir.

Q. Referring to burners, are there not what are called high-pressure burners as well as low-pressure?

A. There are burners called high-pressure, Bray, if I am not mistaken.

Q. And under a high pressure they burn better——

A. They are calculated to burn gas under a high pressure.

264 Q. Is there any way in which you know that the pressure upon consumers nearest the distribution system can be equalized with the pressure upon consumers some distance from the station?

A. No, sir, I don't know of any way.

Q. Is it in your judgment a physical possibility?

A. A physical impossibility.

Mr. MATHEWSON: Will you let me see Exhibit 48, Mr. Burr?

(Paper produced.)

Q. Referring to the preliminary page of Exhibit 48, page A, there appear to be four piers indicated at the northeasterly part of this section?

A. Yes, sir.

Q. Those four piers are not built, are they?

A. Partially built.

Q. Are there more than two piers built there now?

A. I think the foundation, underwater work, is built for some of the others; they are not brought up above the surface.

Q. How many piers are completed?

A. Two.

Q. You note that two of these piers are indicated by dotted lines, Mr. Bradley. Does that indicate that they are projected but not constructed?

A. Indicated, but not constructed.

Q. Do you know that those two piers are contracted for at all?

A. Not yet.

Mr. GANS: Are those piers for which he says foundations are laid?

Mr. MATHEWSON: He says he thinks so.

Q. Do I still understand you to say that the foundations are laid for those two extra piers?

A. Not to any extent. Soundings have been made and dredging has been made preparatory to building them; it was done

265 while the other operations were going on. That is what I mean by under-water work.

Q. Assuming that the capacity of the company's Manhattan plants now equals an actual output of about ten billion feet or a little over, and that the sales of the Consolidated Gas Company amount to over

thirteen billion feet, practically the entire first unit at Astoria would be required to bring the manufacturing capacity of the company up to its sales, would it not?

A. Yes, sir.

Mr. GANS: I object to the witness testifying to that. It is a mathematical calculation. The witness cannot add anything to his testimony.

The MASTER: I will allow it.

Exception.

Q. When you spoke of acting in an advisory capacity in connection with certain matters of other companies than the Consolidated in the Island of Manhattan, does the Consolidated pay you anything additional for that work?

A. They do not.

Q. Do you consider it simply as part of your duty as chief engineer of the Consolidated to keep your eye on property in which it has an interest?

A. I do.

Q. You do not mean to say that you are paid by the Consolidated for services rendered to these other companies?

A. I receive no salary for that to my knowledge.

Q. Well, you would be likely to know it if you received checks from these other companies?

A. I would be likely to find it out.

Q. In reference to the purchase of materials that go to the production of gas, such as coal and oil, are not those purchases made on your recommendation or at your suggestion?

A. Those purchases are made as I explained. If I did
266 not make myself clear, I make requisition for coal and for such supplies as are required, designating in that requisition what I wish to get. That is submitted to the purchasing department and it is purchased by them on my recommendation.

Q. After you reach an output of six hundred or seven hundred million feet, is there any economy in the production of an additional amount of gas beyond that in the cost per thousand?

Mr. GANS: I think I must object to that unless we are going to define precisely what is meant by cost. If he means merely manufacturing cost——

Mr. MATHEWSON: That is just what I mean, manufacturing cost of gas.

A. There is very little reduction in the manufacturing cost of gas after you might say a maximum has been reached.

Q. There would be some difference between a small output and a large output such as I have stated?

A. Yes, sir.

Q. But after you have acquired a large output there is very little economy?

A. There is very little chance for reduction because of the larger quantity manufactured.

Q. Now in reference to the expenses of distribution——

Mr. PAGE: Well, you adopt Mr. Mathewson's statement as to the maximum consumption? He stated——

The WITNESS: I did not hear that statement.

Mr. PAGE: Read that question.

(Question repeated as follows.) "After you reach an output
267 of six hundred or seven hundred million feet, is there any economy in the production of an additional amount of gas beyond that in the cost per thousand?

The WITNESS: And I said no.

Q. And would that be true even of a smaller total?

A. Some smaller, yes, sir.

Q. In reference to the expenses of distribution I think you said that the expense per thousand would tend to be lessened by a large output, Mr. Bradley. Now how is the expense of distribution affected by the congestion of travel in a great city like this?

A. The expense of distribution when the item of repairs and laying mains is concerned is very much increased in a congested district.

Q. Well, repairs and replacements of main is one of the items in distribution, is it not?

A. It is part of the distribution, most undoubtedly.

Q. And what, too, is the effect of the sub-surface structures and pipes which you meet in a metropolitan city like New York upon the cost of distribution?

A. Those things add very much to the difficulty of distribution and also to the expense.

Q. In what way?

A. By making it more difficult to lay mains, and I might say perhaps in short, that it would cost more to lay a main in Wall Street than it would in 150th Street by reason of the difficulties encountered, and the congested conditions of the streets.

Q. What effect on the cost of distribution has the asphalt pavement or this new pavement of concrete laid in cement?

A. Very greatly, because we have to pay very largely for the replacement of asphalt pavements. We do not replace it ourselves; we are not allowed to do that, but the city replaces it, and they charge us what we consider a very high price for it.

Q. So that may not the advantage which comes from an in-
268 creased output be neutralized in a great city like this by the metropolitan exactions and conditions which increase the cost?

Mr. GANS: I object to that as being entirely too speculative.

Mr. BURR: I join in that objection.

The MASTER: I will take it for what it is worth.

Mr. GANS: Exception.

Mr. BURR: Exception.

A. It has been shown, I think, in Massachusetts, where the expenses of distribution were greater in Boston, on account of metro-

politan conditions than they were in other adjoining towns, where there was less consumption and less disturbance.

Mr. GANS: I object to that answer, and move to strike it out, as not responsive.

The MASTER: I will let it stand.

Mr. GANS: Also as hearsay. Exception.

Q. What is the effect on unaccounted-for gas or leakage by a high pressure in the mains?

A. The effect of high pressure in the mains is to increase the unaccounted-for gas or leakage.

Q. And that means a loss to the company, doesn't it?

A. That means a loss to the company.

Q. Have these holders which you refer to as having been erected upon your requisition within the last fifteen or twenty years been located by you?

A. Yes, sir, located by me having in mind the location of the company's property.

Q. And for what purpose in reference to pressure if any?

A. For the purpose of effecting the most economical distribution of gas that in my judgment it was possible to accomplish.

Q. Would it be possible to distribute gas in the city of
269 New York manufactured at Astoria with pressure holders located only at Astoria?

Mr. BURR: I object to that if your Honor please unless he gives some reason.

Mr. MATHEWSON: Well you can ask him the reason.

Mr. BURR: He asked him several times is it possible or impossible, and so forth, and these are merely conclusions and I object to them because they are conclusions.

The MASTER: I assume that he is being asked in such a question as that, practically, whether in his opinion as an expert such a thing is possible or practicable, and I suppose that is the meaning of the question and in that respect I will allow it.

Mr. MATHEWSON: You will remember that Mr. Burr asked questions in reference to these holders, and whether or not they were to be disposed of; the question was raised by him.

A. It is impossible to distribute gas over long distances without intermediate storage holders in order to lessen the pressures at which it is forced through the mains. It would be a very difficult matter to distribute gas to the consumers from holders located at Astoria and no holders in New York, in any satisfactory manner.

Q. Or within any reasonable limits of pressure?

A. Or within any reasonable limits of pressure.

Q. Was the question of the establishment of a water gas plant as distinguished from a coal gas plant at Astoria considered by you, Mr. Bradley?

A. It has been considered in a way to the point, or so far that I have a little diagram made of where I would probably locate the water gas plant in the Astoria property and——

270 Q. I am referring to the present first unit.

A. No, no, not in connection with the first unit.

Q. You considered that a coal gas plant was better for the interest of the company at the present time?

A. It is better for the present interests of the company.

Q. Were you influenced in that by the constant increase in the price of oil to which you have referred?

A. The constant increase in the price of oil and the equally constant decrease in the quality of oil.

Q. You spoke of the gas acquired by this company from certain other companies. Do you or do you not recall that gas is furnished under certain agency agreements by which it is manufactured by these companies for the Consolidated?

A. There is some such agreement I have heard spoken of, but I am not familiar with it.

Q. But what the terms of the agreement are you do not know?

A. No, I do not know.

Q. Your attention has been called to a statement of Newbigging that by doubling the pressure you deliver half as much gas again. Does it follow that it will be necessary to consume half as much gas again in the case of the apparatus of any consumer, if you double the pressure?

A. No, sir. They need not consume any more than they want to.

Q. That would be so only in case the meter cocks were left at the same aperture and also all the burners at the same aperture, would it not?

A. The meter cock need not necessarily be changed, if the burner cocks are taken care of.

Q. Either one?

A. Either one; I do not now recall exactly in what connection that statement was made by Mr. Newbigging. I think it was made in connection with the passage of gas through mains rather than with regard to the burning of gas.

271 Mr. MATHEWSON: Can you find that reference to the doubling of the pressure resulting in the delivery of 50% more gas?

Mr. BURR: Yes, page 225.

Q. (Handing book to witness.) Look at it and see if you have anything further to say, Mr. Bradley?

A. Yes, it does refer to the consumption of gas. I was not quite clear whether it referred to the consumption or the amount of gas passing through mains by varying pressures.

Q. You gave a list yesterday of the holders of the company, and you have been questioned respecting them to-day. I want to ask you whether in that list of holders you included the relief holders at the manufacturing stations, which are perhaps properly part of a manufacturing plant?

A. No, sir, they are excluded entirely.

Q. So that there are relief holders at the station not included in that list you gave?

A. There are holders at all the water gas stations which are not included in that list, for I do not include those holders as being part of the distributing system; they are part of the plant.

Q. These holders which you have defined, then, might be designated as distributing holders?

A. Distributing holders or storage holders.

Q. As distinguished from those at the works?

A. As distinguished from what we call the relief holders.

Q. In your testimony yesterday in reference to replacements, you referred to receipts or certificates or some memoranda that were delivered by you to the accounting department. Do I understand that in those you separate the items of replacements as to money value from the items of new construction, or is that done in the
272 accounting department, by reference to their books?

A. That is done in the accounting department.

Q. So far, however, as the pay rolls go, do they not show whether or not it is on repair, replacements or new construction?

A. The pay rolls show that fact.

Mr. GANS: Do you mean by that that the pay rolls are certified by him?

Mr. MATHEWSON: Yes, by his department.

Q. Are you able to say how the use of the flat flame burners, the old burners, compares relatively to the use in former years, whether it is increasing or decreasing?

A. The use of the flat flame burner is decreasing uniformly and steadily.

Q. They are the burners that require small pressure, or that can be operated by small pressure?

A. Yes, sir.

Q. Referring to the Northern Union works, to which reference has been made, and other works of the various companies, would it, in your judgment, be prudent business to have no reserve capacity for manufacturing?

A. No, sir; I should dislike very much to have all my works in winter running up to the full capacity and know I had nothing in reserve in case of an explosion or breakdown.

Q. In speaking of the surface covered by the first unit at Astoria, which you roughly thought to be 2,000 by 350 feet, does that include any land for coal storage—coke storage?

A. I intended to include the land from the inshore bulkhead back to Winthrop avenue, whether I gave it sufficient length or not I don't know.

Q. Would that leave room for the coal or coke storage?

A. A certain amount of room at the rear of the retort houses.

Q. Would it leave any room for the water plant to which
273 you referred?

A. No, sir; that would be outside.

Q. Would that leave any room for an office building?

A. Not at all.

Q. Or electric light?

A. No.

Q. Or any other space about the building such as might be required?

A. No room for the shop as necessary adjuncts of a gas plant.

Q. So that the area which you have mentioned would not be adequate for the reasonable operation of the works, would it?

A. As I understood the question he asked me the room now occupied, and I gave it in that way, but that does not include the entire plant.

Q. In reference to the construction at Astoria, do you know whether few or many bids were invited for the construction of the various parts?

A. A great many bids were invited on each and every contract.

Q. Who indicated the contractors who should be entitled to bid?

A. I did in some cases, my assistant did in some cases, in other cases some of the directors indicated who should be asked to bid.

Q. Did you omit anyone whom you thought likely to present a favorable bid to the company?

A. No; I omitted no one who I thought was in a position to do satisfactory work in case the work was awarded to them.

Q. Referring to the small holders of the company, have these great holders to which you have referred, say five million feet holders, been built until within the last few years?

A. Very few except within the last—you might say ten years.

Q. How about the small holders, were they built earlier than that?

A. Some of the small holders were built forty years ago.

Q. Was the requirement of the business or the state of the
274 art such that it was practicable to build the large holders thirty or forty years ago?

A. No, sir; holders built now would have been considered the dream of a lunatic years ago.

Q. How about the steel tanks?

A. Steel tanks have only been built within the last ten or fifteen years perhaps—I don't know, it may be twenty years.

Q. Due to the advance in the art of steel construction?

A. Due to the advance in the art of steel construction.

Mr. MATHEWSON: That is all.

By Mr. BURR:

Q. When you say that you believe that three cents additional in the cost of gas will be required by reason of the additional candle power made necessary by the present law, upon what do you base that opinion?

A. On a mental calculation of what, in my opinion, quantity of oil would be required to produce the extra quantity.

Q. Did you make that mental calculation here?

A. Right here.

Q. Will you repeat it orally?

A. The mental calculation, it would be about two-thirds of a gallon of oil.

Q. Two-thirds of a gallon of oil?

A. Excuse me, that is wrong; I calculated at one and one-half cents a candle power, that was my basis of calculation.

Q. Upon what do you base the cent and a half per candle power?

A. With a gallon of oil giving say five candle power, and all things in consideration I just simply jumped at the cent and a half per candle power.

Q. Well, it is a guess on your part?

A. It is a pretty solid guess, yes, sir.

Q. Would you guess that it would cost one million dollars
275 to put up these additional improvements that are now in course of construction at Astoria but not yet built; upon what do you base that?

Mr. MATHEWSON: They are not in course of construction.

Q. They are contemplated, assuming that to be the fact, upon what do you base that statement?

A. Upon the construction of similar apparatus right on the same ground.

Q. The apparatus consisting, for instance, of what?

A. Of buildings and pipe.

Q. What building?

A. The office building.

Q. How much would it cost, the one you have in your mind's eye now?

A. About $50,000.

Q. About how many such buildings are contemplated?

A. There will be one at present; if there are more in the future——

Q. That is $50,000?

A. Yes, sir.

Q. What else?

A. The pipe across the river.

Q. How much is that going to cost?

A. About $500,000.

Q. How do you make that total up?

A. By knowledge and experience in the general cost of laying pipes.

Q. What is the general cost of laying pipes?

A. About $500,000, for that length of pipe.

Q. Is it so much per yard, or what?

A. It is ordinarily put in at so much a foot.

Q. Well you are speaking now of it being put in ordinarily?

A. Yes, sir.

Q. And that ordinary price will be paid for it?

A. That ordinary price will be paid for it.

Q. What is the ordinary price?

A. That I cannot give you, sir, without getting my—getting to my estimate and data that I have on that subject.

Q. How can you arrive at the conclusion it will cost $500,000 without knowing the unit price?

276 A. A general conclusion from my long and intimate connection with the business.

Q. Without regard to figures?

A. My opinion is worth something.

Q. I will admit that?

A. Yes, sir, thank you.

Q. But I would rather have the figures?

A. I would give you the figures if I had them here, but I haven't them.

Q. So that is a mere guess, is it not?

A. No, sir, it is not a guess, it is an opinion.

Q. The same thing practically?

A. A legal opinion is a guess just as much.

Q. What else is in contemplation, the construction of which enters into this million dollars which you think will be additionally required?

A. We require shops, the machine shops, carpenter shops, and additional coal handling and conveying apparatus.

Q. And those buildings you think will cost the balance of the million dollars?

A. I have already made a general computation, not a guess, but a general computation, that the sheds that will be required for covering the coal, will be $400,000.

Q. That is $950,000?

A. Yes, sir.

Q. What else?

A. Well we have not yet put any price on the machine shop, and carpenter shop, which I should say would easily cover another $200,000.

Mr. MATHEWSON: You have not included the second holder, the tank of which is constructed or under construction.

The WITNESS: No, sir; that is about $750,000.

Q. Upon what do you base the statement that the first unit is to cost thirteen million and some odd hundred thousand dollars?

A. On my estimate.

Q. When did you make the estimate?

A. Over a year ago.

277 Q. And that estimate you submitted to the directors?

A. Not in its entirety.

Q. Was it a written estimate?

A. It was a written estimate.

Q. And it is part of the——

A. Part of the records of the company.

Q. You said because of improvements made by the city along the river front that the cost of the transportation of coal had been increased?

A. Yes, sir.

Q. To what special point did you refer?

A. I referred particularly to 21st Street, to 99th Street, and in the immediate near future I think to 14th Street.

Q. Do you mean to be understood as saying that you have removed your coal yard from those points—you have no coal——

A. No, sir.

Q. You have no coal yards there now?

A. It necessitates increased expense in handling the coal on account of the intervention of the marginal street. In a case where we had a railroad, where the coal was brought to a dock, in the case of 21st Street, and immediately under the coal sheds, you might say, and the coal was delivered from the barges into the coal shed, instead of that we now have to transport it by conveyors and cars and by other means to get it to where it was delivered previously to the marginal street being constructed, at an increased expense.

Q. Now I understood you to say that for the purpose of distribution of gas in the city it is absolutely necessary to have the holders distributed at various points?

A. Yes, sir.

Q. I understood you to testify yesterday as follows:—I said this to you: "Then this belief that has been shared by so many that the places occupied by your holders were to be turned into public parks is a myth?" and your answer was: "Anyone who had that
278 idea about the holders was very badly mistaken." I understood you to testify yesterday that you were going to keep the holders here?

A. That is my intention, and I do not recall having said anything else.

Q. In your estimate you say that the cost of the unit alone will be $9,217,441, the total cost of the unit including real estate will be $13,000,000; is that correct?

A. I think the figures are $13,096,000, as I remember it.

Q. That is including real estate and the tunnel?

A. That is including real estate and the tunnel.

Q. Do you mean the real estate occupied by this unit, that will be occupied by this single unit or the real estate to be occupied by the general plant of 376 or 367 acres?

A. I mean deducting the cost of the land in order to arrive at the cost of the unit without the land, that is what I was asked for and I gave it.

Q. The cost of the land and of the tunnel will be the difference between $9,217,441 and $13,000,000, which you testified was the cost of both?

A. Yes, something of that kind.

Q. How much do you figure that the tunnel is to cost?

A. I think my testimony yesterday will show $2,600,000.

Q. And then the balance of the difference is for the real estate?

A. About $1,300,000 for the real estate?

Mr. MATHEWSON: The exact amount appeared and Senator Page made the deduction from the $13,000,000, by which the remainder of $9,217,000 was obtained.

Q. On what do you base your value of the land?

A. By a reference to the books of the company which show what was paid for it.

279 Q. Then you did refer to the books of the company?
A. I did.

Q. And you also, if I did not misunderstand you, referred to the extra cost still to be incurred for grading and filling as making up part of that million dollars additional, did you not?

A. No, in that amount the amount of grading and filling is the amount already shown in connection with the prosecution of the work of this first unit.

Q. How much filling has been done?

A. We have filled as much as we have been obliged to take off the surface, the number of cubic yards I cannot say, as I stated yesterday that same thing.

Q. How much does the filling cost per cubic yard?

A. In the neighborhood of 75 cents.

Q. Then before you had this talk with Mr. Crimmins and President Gawtry it seems you examined several other parcels of land in the City of New York, in the Borough of Manhattan, for the purpose of ascertaining their availability as a site for an additional gas plant?

A. As far as my recollection goes, I have not testified to anything of the kind.

Q. I may be mistaken, but I will ask you now whether you did not say to Mr. Mathewson a few moments ago that before the purchase of the Astoria site for the plant you had examined several other parcels of land in New York City?

A. No, sir, I didn't say so, and I would have been very foolish to say so, because my object was to get out of New York City.

Q. Have you found none as available as the Astoria location?

A. No, sir, I was not looking for land in New York City, I was looking for land with the object of getting out of New York City.

Mr. MATHEWSON: My question was about or in the neighborhood, Mr. Burr; not in the city.

280 Q. Then you looked at land about or in the neighborhood of the city?

A. That is correct, yes, sir.

Q. Can you give us the sites that you looked at?

A. I looked at one piece over on the Hackensack Meadows near Snake Hill, and I looked at another piece at Secaucus, New Jersey; I looked at another piece out in the vicinity of Little Neck, L. I., Oyster Bay; and another piece on the Sound called Hunt's Point.

Q. Did you get an option on any of the pieces you have named?

A. Yes, sir.

Q. Which one?

A. On the New Jersey piece and another one I have not named that I was to name directly, at a place called Barretto's Point; I had an option on that also.

Q. At what price did you get the option at Barretto's Point?

A. I don't know.

Q. You don't know?

A. I don't know. I was told we had an option there.

Q. And you did not get the option?

A. I did not get the option, no, sir. I don't do any of the financial business of the company.

Q. Do you know what the price was that the option was given at?

A. No, sir.

Q. Can you state the price at which the option was given upon any of the parcels of land you have just mentioned?

A. No, sir, I didn't examine them with regard to any option or price or anything of that kind, but simply examined them as practicable and feasible places for the construction of a gas plant, as an engineer, and not as a financier.

Q. And the question of price did not enter into your consideration?

A. Not at all.

Q. Did you find the Astoria site the most advisable to accept?

A. By all odds.

Mr. BURR: That is all.

281 By Mr. PAGE:

Q. The proper way to arrive at the cost of the unit candle power in the gas is to divide the cost of one gallon by five?

A. Exactly.

Q. To get one candle power?

A. Yes, sir.

Q. And multiply that by the number of candle power that you desire to produce?

A. Exactly.

Q. If oil costs 4.08 a gallon, then two candle power would cost only 1.63?

A. Yes.

Q. And it costs no more to enrich the gas at Astoria than it does cost to enrich the gas in Manhattan, does it?

A. It should not.

Q. Raising the gas to the additional candle power in Astoria would cost just exactly the same as raising the gas to the additional candle power in New York?

A. Yes.

Q. Of course the reductions which you say you have made in the cost of the manufacture of gas do not relate to the items of reduction that would arise from the concentration of the plant and the improved mechanical devices?

A. I have put in in some of the plants in New York improved mechanical devices that would make a reduction.

Q. But not to the extent you will have them in the Astoria plant?

A. Not to the full extent, but put them in a small plant to experiment with, to see if they would be adopted.

Q. This mat-er of handling of the material, the cartage in Astoria, will also lead to a reduction in the cost of manufacture, won't it?

A. In some cases that will probably be more than offset by the

fact that we have to transport all our coke to New York which we have not got to do now; that will be a very expensive operation.

By Mr. MATHEWSON:

282 Q. Isn't coke a very brittle substance and hard to handle without difficulty?

A. Yes, sir; very brittle and easily broken.

By Mr. PAGE:

Q. With regard to regulating the pressure of gas by the meter, does not the pressure of gas as you deliver it now vary?

A. It necessarily varies; we cannot help it.

Q. Therefore a man to keep a uniform pressure at his tip would have to stand with his hand on the key all the time?

A. If the man wanted to keep it to one-tenth he would have to stand there, but those are things we cannot help. It is wrong that we should be held responsible for a thing we cannot control.

Q. You vary your pressure in an hour sometimes as much as three inches?

A. Yes, sir, at the stations, but an increase of three inches pressure at the station will probably result in no increase two miles from there.

Q. If the key at the burner is set when your pressure is one inch and you increase to three inches that burner is going to blow?

A. It should blow, and if it blows it will not consume any more gas than if it did not.

Q. Well, more gas will go through the meter, will pass out through that burner, whether it is consumed or not?

A. No, because when it blows the consumer will turn it down and therefore it won't pass any more.

Q. If he happens to be in the room he might turn it down?

A. If he is not he should turn the gas out, because he is wasting it.

Q. I believe the illustration was this in the Stevens Committee, that a boarding-house keeper would probably have to hire someone to run around and regulate the keys?

A. In a boarding-house they generally take a burner off and stuff it with cotton.

283 By Mr. BURR:

Q. Is it contemplated to supply gas to Queens County and the outlying territory over in Astoria?

A. That is not within my contemplation now, I have no knowledge that they will ever do that.

Q. But gas could be supplied from your Astoria plant to all the outlying districts there?

A. Yes, maybe supplied to Long Island City because Astoria is contiguous to Long Island City; whether that is in contemplation or not I do not know, it is not in my mind, and whether it is in the company's mind I don't know.

By Mr. MATHEWSON:

Q. Is it possible, whatever the pressure in the main may be, to have a uniform pressure at the burner in the house?

A. At the burner tip.

Q. Is it possible to have a uniform pressure there, no matter what pressure you try to keep in the main?

A. No, you cannot get a uniform pressure in a house under any circumstances.

Q. You cannot maintain a uniform pressure at every point of every main?

A. No, because every burner which is lighted and extinguished in a house alters the pressure within the house.

Q. Astoria is located about halfway between the northerly and southerly ends of New York City on Manhattan Island?

A. Yes, sir, about opposite 120th Street.

Q. When you speak of oil, the additional amount of oil required, there is also a certain additional amount of fuel required in order to render gaseous this additional amount of oil?

A. Yes, sir.

Q. In the aggregate that would amount to a considerable sum?

A. Yes, sir.

M-. GANS: I object to the statement about considerable sums, if the Referee pleases.

284 Mr. BURR: I join in that objection.

The MASTER: I think the question is objectionable as to form.

Q. Well, I will ask whether that would add to the expense?

A. That would add to the expense. The calculations of the Senator were very good and all right, still there are odd additions to be made to them.

Q. And you did not take into account in reply to Senator Page's question the higher priced oil which you would require under the new candle power?

A. Required in the winter.

Adjourned at 4.30 P. M. till to-morrow, July 20th, 1906, at 11 o'clock A. M.

Last Exhibits:

Complainant's 69.
State's A.

285 [illegible] Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *July* 20, 1906—11 o'clock a. m.

Met pursuant to adjournment.
Present: The Master, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

286 COLIN C. SIMPSON, a witness called on behalf of the complainant, having been first duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Mr. Simpson, where do you reside?
A. Flushing.
Q. Are you connected with the complainant, the Consolidated Gas Company?
A. I am.
Q. In what capacity?
A. General Superintendent of mains and services.
Q. What is the difference between mains and services as used in the art?
A. Well, the main is the conduit of cast iron which takes the gas from the works to the streets; the services branch off from these street mains to the houses.
Q. The small pipe running from the main to the house meter?
A. Yes, sir.
Q. What is the difference between an inside and outside service?
A. An inside and outside service?
Q. Yes, if any.
A. Well, we qualify that, one is a service and one is a house pipe.
Q. Pipes in houses belonging to the customers are house pipes?
A. Yes.
Q. And pipes you run from the main to the meter are services?
A. Is the service.
Q. How long have you been superintendent of mains and services of the complainant?
A. I have been General Superintendent since May, 1889.
Q. And from the time of consolidation in 1884 until 1889, what position did you occupy?
A. I was branch superintendent.

Q. Had you any connection with the mains and services of any of the six constituent companies which formed the Consolidated Company prior to 1884?

A. Yes, sir.

Q. State?

287 A. I was superintendent of mains for the Municipal and Knickerbocker Companies from 1881 to 1884.

Q. Are you familiar with the mains and services of the complainant, the Consolidated Gas Company, as they exist?

A. I am.

Q. Are you familiar with the cost of the material and pipe going into the mains?

A. I am.

Q. And the cost of laying?

A. Yes, sir.

Q. And the character of the soil in the City of New York as rock or otherwise?

A. Yes, sir.

Q. And the other elements that enter into the value or cost of a main as in the ground?

A. Yes, sir.

Q. From 1884 down to date will you state how your time generally has been spent, whether indoors or out of doors, and in what manner?

A. Up to a little over a year ago, with the exception of an hour in the office in the morning and an hour in the office in the afternoon, I was out of doors altogether.

Q. Doing what?

A. Looking after the work and seeing how the work was carried on.

Q. Wherever the street was opened to lay new mains or expose old mains, was it your business to be there to see it?

A. It was my business to be there and see it.

Q. Have you seen personally a large proportion of the mains and services of the company?

A. You may say nearly every bit of it.

Q. What is meant by stripping a main?

A. Well, exposing the main entirely for its entire length. We strip a main on a block between 21st Street and 22nd Street on any avenue, and the main would be entirely exposed for its entire length, and the street dug up and main exposed up to the underneath part. I mean to say we do not only strip the top of it——

288 Mr. PAGE: Down to the underneath part, you mean?

The WITNESS: Down to the underneath part.

Q. Have you charge of the laying and care of mains and services?

A. Yes, sir.

Q. And you have had in the past?

A. Yes, sir.

Q. Do you know the condition of the mains of the complainant and its services?

A. I do.

Q. Will you describe the mains of the complainant company, giving the size and the feet, as they existed on October 31 last?

A. I will give these in feet. I will give the size and number in feet in each case.

1½	inch.....	1,407 feet.
2	"	3,365 "
3	"	222,741 "
4	"	557,469 "
5	"	1,799 "
6	"	2,129,088 "
8	"	528,040 "
10	"	71,286 "
12	"	321,536 "
16	"	98,901 "
18	"	29,633 "
20	"	178,803 "
24	"	45,956 "
30	"	131,583 "
36	"	22,242 "

Q. A total of how many feet?

A. A total of 4,344,849 feet, which is 822 miles and a slight fraction; 822.2 I think it is.

Q. Have any of the mains which the company took over in 1884 been replaced by new mains since?

A. Yes, quite a number. Do you mean under replacement, new mains laid?

Q. Yes, in place of smaller mains taken up.

289 A. Well, at the time of the consolidation we had 710 miles. Out of that 710 miles we have laid in the—we have to-day 822 miles. Out of that 822 miles, 468 miles are new mains which have been laid since the consolidation. We took up or abandoned, as the case may be, over 222 miles of small sizes, 2's, 3's and 4's.

Mr. BURR: New mains?

The WITNESS: No, we laid 468 miles of new mains and 222 miles of old mains we took up.

Q. Then over half or about one-half of the total mileage of all mains at present are new mains laid since 1884 either by way of new construction or replacement of existing mains?

A. More than one-half.

Q. What percentage of the total mileage of mains of the company would you say is thus either new or that has been stripped, examined, recaulked or otherwise gone over by you?

A. Between 90 and 95 per cent.; I think it would be nearer 95 per cent. than 90 per cent. I will qualify that; the mains stripped and gone over would not total 90 per cent., but the mains stripped and examined and gone over plus the mains laid on new streets would be between 90 and 95 per cent., nearer 95 than 90 per cent.

Q. And have you personally seen this mileage, substantially all of it?

A. I have, sir.

Q. What is the condition of the mains which are not new but which have been stripped and examined, recaulked, and otherwise put in order?

A. They are absolutely physically as good as the day they were laid.

Q. Have you found any physical deterioration in any of the mains?

A. Not in a single instance.

Q. Of what material are they constructed?

A. Cast-iron.

290 Q. Are you able to state the value of these mains as they exist to-day in the ground?

A. I am, sir.

Q. Will you state it?

A. Well, do you mean the——

Q. The value to-day——

A. If I had to relay them to-day under existing conditions?

Q. The present value to-day if they were relaid?

A. $12,636,150.

Mr. BURR: I object to this question and ask that the answer be stricken out, because it does not appear that this is the best evidence with regard to the expenditure about which he is now testifying.

Mr. MATHEWSON: It is not an expenditure he is now testifying to.

The MASTER: He was asked as to the value.

Mr. BURR: I misunderstood you. Objection withdrawn.

Mr. PAGE: I would like to have the question or the answer made a little more definite, because I think the question called for one thing and the answer gave another. Mr. Mathewson asked for the value of the mains and the witness said the value to replace under existing conditions now was so much. We would like to know just which this value is, whether it is the value of the mains in the ground——

The MASTER: Is not that a matter for cross-examination?

Mr. PAGE: No, I think the question calls for one thing and the answer gives another. It is not responsive to the question. I would like to have it cleared up now, if I can.

Mr. MATHEWSON: I will ask another question which will clarify it, I think.

Q. I refer, Mr. Simpson, to the present value of the mains in the ground including cost of material, the expense of laying, and
291 other items that enter into their value if reproduced to-day?

A. That is the figure I have given.

Q. In equally good condition?

A. Yes, sir.

Q. Will you state how many services the company had on the 31st of October, 1905?

A. 86,338.

Q. And are you also familiar with the services and their value and the cost of replacing them?

A. I am.

Q. On the same basis as my question as to mains what would be the present value of the services of the company?

A. $1,994,034.35.

Q. What proportion of these services have been installed since 1884?

A. Over 90%—either installed or replaced.

Q. That is at least that proportion of the old services——

A. It would be nearer 95%, 90% would be a very conservative estimate.

Q. How do the new services, this 95%, compare in size or capacity with the old services?

A. They average in size, three times the capacity. That is, the general size of services, most services at that time were three-quarters or one and one-quarter inches. At the present time we install nothing less than one and a half inches.

Q. An inch and a half service has three times the capacity of a service of what diameter?

A. It is about two and a quarter times the capacity of an inch service.

Q. You did not understand the question.

A. You want to know how the capacity of an inch and a half service compares with the capacity of an inch and a quarter or an inch service?

Q. Yes, put it in that way.

A. An inch and a half service is equivalent in carrying capacity or delivering capacity to 5.66¾ inch services, 2.75 one inch services and 1.58 inch and quarter services.

292 Q. In the value of the service and in the service do you include a box and valve?

A. I do.

Q. About what is the cost of the box and valve?

A. They average about $3.50.

Q. In what condition are the services kept?

A. They are kept in perfect condition. We do not allow them to deteriorate at all; any service that shows any sign of deterioration is replaced at once, and that has been the policy for the last 17 years.

Mr. BURR: I move to strike that out.

The MASTER: Strike it out if you like. It will necessitate asking another question, that is all.

Q. Has that been the practice for many years past?

A. Yes, sir.

Q. Ever since you have been connected with the company?

A. Ever since I have been general superintendent.

Q. What proportion of these services is under asphalted streets in the City of New York?

A. About 90%.

Q. When I use the word "asphalt" I mean either the asphalted streets or streets with this new pavement.

A. With the new pavement, about 90%.

Q. What is this new pavement?

A. Some of it is asphalt, some granite block on concrete, a very small proportion is granite on sand, and some wood blocks and asphalt blocks.

Q. What proportion of the streets of New York are covered by this pavement?

A. Close on 90 per cent., about 88 per cent.

Q. Prior to the covering of the street with the new pavement was it the custom of the company when it had occasion to open the street either to lay new mains or repair old mains or services, to do its own replacing of the pavement?

A. Yes, sir.

293 Q. What was the cost to the company of replacing it per square yard under those conditions?

A. Twenty-five cents; that is what it costs to-day; it would not be any more then; it was not as high then.

Q. That perhaps would be an average?

A. We contract for our paving at that price; for small openings, scattered openings, twenty-five cents a square yard and for extended openings fifteen cents a square yard.

Q. Take now the asphalt pavement when that is done, does the company itself replace the pavement?

A. No, sir, we are not allowed to.

Q. The asphalt company guaranteeing the pavement, you are compelled to employ them?

A. We can only get a permit under the condition we employ the asphalt company to replace the pavement.

Q. What is the cost, or what do you have to pay the asphalt company to replace the asphalt pavement?

A. The cost ranges from $2.70 to over $7.00 a yard on Broadway.

Q. How about on other streets?

A. The average price is about $3.25 a yard for asphalt.

Q. Now, taking the new pavement known as block——

A. Granite block?

Q. Yes, granite block, on concrete?

A. That is replaced by the city employees. We are charged for that for the first square yard $8.00 and $4.00 for each additional yard.

Q. All as against twenty-five cents a square yard under the old pavement?

A. Yes, I can contract for the same pavement for $1.90 a yard.

Q. Are you permitted to?

A. We are permitted now this last year; if an opening is over 250 feet long we are permitted to contract with the contractor to replace the pavement for us, but we have only just started on that.

294 Q. For any smaller jobs you are still——

A. Paying $8.00 for the first yard and $4.00 for the additional yards; in small openings it is generally only one yard.

Q. What is the condition of the streets of New York as to subsurface construction pipes and one thing or other with which you have to deal in laying gas mains.

Mr. GANS: Objected to unless shown that the witness knows the condition with respect to other pipes and other things that are in the streets of New York. We have had a lot of general hearsay testimony from Mr. Bradley and it got us into a lot of trouble and it is going to mean a lot of trouble in the way of cross-examination, and I think we are going to be very much better off and we are going to save a lot of time if nothing is put in except what the witnesses actually know.

Mr. MATHEWSON: Very well.

Q. I will ask you a further question before asking your answer to that. Are you familiar with the condition of the streets of New York, the sub-surface conditions as to pipes and other sub-surface structures belonging to other concerns than the complainant?

A. I am, sir, thoroughly.

Q. Is it your business to keep familiar with those in order that you may know what may be done with the pipes of the company?

A. It is a very important part of my business.

Q. Now will you answer my original question as to what the condition under the surface is in reference to pipes, etc.?

Mr. GANS: Objected to as calling for the witness' conclusion; if the witness knows about these conditions he can describe
295 specifically and directly the number of pipes in a street in the city of New York through which they have to operate their mains, or he can save time on that by producing a drawing or diagram which he can testify to be accurate, but to say, as was said yesterday by Mr. Bradley, that the streets of New York were so congested that you could do this or you could not do that simply means we have got on our cross-examination to drag out what ought to be brought out directly and specifically on the direct examination.

Mr. MATHEWSON: You are entitled to cross-examine if you wish to, I presume. I do not propose in my examination to begin with the details which you may desire on cross-examination.

Mr. GANS: Therefore I object to the witness' conclusions as to facts.

The MASTER: It seems to me perfectly proper for a witness whose daily business, as he has testified, takes him through all the streets of the city of New York, one who has personally examined excavations made throughout the city, to testify regarding general conditions, leaving it to be developed on cross-examination as to any deficiencies in his knowledge. I will allow it.

Mr. GANS: It is objected to on the ground that it is not the proper subject of opinion evidence of any sort, and this question calls for the witness' conclusions and opinion evidence.

Objection overuled; exception.

Q. I ask for your own knowledge, Mr. Simpson.

A. Do you wish me to state any certain streets or anything?

Q. Any way you please to answer the question.

296 A. Well, on Third Avenue, between Grand Street and 125th Street or 127th Street, you might say——

Mr. MATHEWSON: Speak more distinctly, I don't think the stenographer can hear you.

The WITNESS: Take Third Avenue, between Grand Street and 129th Street—shall I give the pipes there?

Q. No, I don't ask you for that, but as to the condition as to sub-surface constructions other than our own pipes?

A. Well, it is so crowded that it is practically impossible to-day to lay anything—I will guarantee even nobody could lay even a 4 inch main.

Mr. GANS: I move to strike that out as expressing a conclusion and opinion of the witness upon a matter that is not the subject of opinion evidence.

The MASTER: I will let it stand.

Mr. PAGE: Exception.

Mr. GANS: Exception.

The WITNESS: Eighth Avenue is the same way, there isn't room for any gas pipe of any size unless the whole thing was altered over—water pipes and gas pipes, the subways and everything else.

Mr. GANS: The same motion with respect to that answer.

Motion denied; exception.

The WITNESS: Second Avenue, First Avenue, Lexington Avenue, Fifth Avenue, Seventh Avenue, Eighth Avenue I gave, Ninth Avenue—the conditions are the same, there is no room for another gas pipe in the avenue; it might be possible to lay a gas main
297 for one block and then you would have to skip three or four blocks before you could get another where it was possible.

Q. How about Broadway?

A. Broadway is the same. That is the worst probably of the lot.

Mr. PAGE: That is, you have to take up some pipes?

A. On Third Avenue——

By Mr. MATHEWSON:

Q. Would it be possible by going deep enough under the present structures to lay a main in these avenues?

A. No, sir, it would not, because we would interfere with the sewers, to go under the sewers, that would be an impossibility.

Q. If it were possible, what effect would that have upon the expenditure necessary to lay the mains and the expense of caring for it thereafter?

A. The expense of laying would be enormous, and the expense of repairs would be enormous when they were needed.

Mr. GANS: I presume my objection will apply to all this testimony with regard to this condition of the streets, also my motion to strike it out.

The MASTER: Well, your motion to strike out that last is a little better than the other one, in my judgment. I will allow it to stand though, for what it is worth. Enormous is a very broad term.

Exception.

Q. Would it be possible, in your opinion, to lay through these streets in the city of New York a line of trunk mains for the purpose of endeavoring to equalize the pressure, or for any other
298 purpose—an additional line of trunk mains?

A. Under present conditions, no.

Q. You said that up to date no physical deterioration had been observed in the mains of the company. Are you now observing any effects or recent effects, from electrolysis or electricity coming from the traction systems or otherwise?

Mr. GANS: Objected to unless shown that he knows that is the cause.

Mr. MATHEWSON: I said "or otherwise." I don't think you listened to my question.

Mr. GANS: I listened very carefully. If he knows what the cause of it is he may testify.

Question allowed; exception.

A. We are commencing to notice it now.

Q. Have you made any tests in connection with that subject?

A. I have had the electricians make tests.

Q. Have you observed any difference since the elevated railway has been in operation by electricity, and the rapid transit subway systems?

A. I have not myself; the electrician has.

Mr. BURR: I move to strike out what the electrician has noticed; that is clearly incompetent.

Mr. MATHEWSON: I accept that, yes.

Q. Is the electrician to whom you have referred, an employee of your department?

A. No, sir.

Q. So that your information as to the effects of electrolysis to which you referred is second-hand, so to speak, is it, or is it your investigation?

A. He was engaged by us to make the investigation and reported to me on the subject.

Q. And what you had stated was rather from his report than from your own investigation?

Objected to, unless the witness is produced.

299 A. I saw the trouble.

Q. Well, did you see any effect yourself?

A. I did.

Q. What?

A. I saw the main being pitted at the corner of Church and Spring Streets.

By Mr. GANS:

Q. You saw that it was pitted or that it was being pitted?

A. I saw it was pitted. The pitting goes on continuously when it once starts.

By Mr. MATHEWSON:

Q. What danger in your opinion, if any, exists in future from the operation of these electric systems?

Objected to as purely a matter of opinion; this witness is not an electrical expert.

Mr. MATHEWSON: He knows the effect of electrolysis.

Mr. GANS: No, he can see it is pitted, but what does it and whether it is liable to continue I do not think he is competent to testify to.

Mr. BURR: Objected to. It does not appear by this witness what the effect of electrolysis is upon the mains, he has no knowledge of its effect, therefore he is in no position to testify as to what its future effect will be.

The MASTER: I do not think you have qualified him as an expert on that branch of it. At the present stage of the case it seems that all he knows is what he derived from a report made to him, except his observation, and I do not think that qualifies him.

Mr. MATHEWSON: I will ask two or three questions to see whether he is qualified.

Q. Are you familiar with the effects of electric currents on mains?

A. Yes, sir.

300 Q. How have you gained that familiarity?

A. By experience and reading.

Q. Have you made a study of that subject, among others in connection with your duties?

A. Yes.

Q. Do you know how tests are made as to the effect of electric currents on mains?

A. I am not thoroughly familiar, I could not give a very good description of it, only in general.

Q. Are you sufficiently familiar with the effect of electrolysis so that you feel able to express a reasonable opinion as to the effect of the electric currents on the mains?

A. I am, sir.

Q. Have you observed any of this pitting before the elevated railway and subway were put in operation by electricity?

A. In one instance, yes.

Q. Where was that?

A. Brooklyn Bridge.

Q. And that system had been in operation by electricity for some time theretofore, had it not?

A. Yes.

Q. Will you state if you can, generally, what the effect on the mains is from an increased amount of electric current in the streets?

Mr. BURR: Objected to unless a better foundation for the testimony is laid than has been laid; it does not appear from anything Mr. Mathewson has extracted from this witness that he is an expert on the effect of electrolysis upon the mains, and if I have permission,

I would like to ask a question or two as to his experience in this regard.

The MASTER: You may.

By Mr. BURR:

Q. I understood you to say, Mr. Simpson, that the company had employed an expert electrician to ascertain the effect of electrolysis on the mains that you have been testifying regarding?

A. Yes, sir.

301 Q. You were not employed by the company to make an examination?

A. No, sir.

Q. Was that because you did not have the experience sufficient to make the examination thoroughly and effectively?

A. Yes, sir.

Mr. MATHEWSON: Objected to as a conclusion.

Mr. BURR: He has answered it and said that it was——

Mr. MATHEWSON: I suppose that was so.

Q. When was the expert employed by the company?

A. We employed one first three years ago, then the following year—three successive years, and again then this year we employed one twice.

Q. Isn't it a fact that the only experience you have with regard to this particular matter of the effect of electrolysis on the mains of the Consolidated Gas Company in the streets of the City of New York is derived from information which you have received from experts when employed by the company?

A. It is.

Mr. BURR: Then I object to the question.

Mr. MATHEWSON: I did not ask what the effect had been, I asked what the effect would be of an increased current of electricity in the streets of the City of New York, as compared with the past.

Mr. PAGE: If he does not know what it has been in the past, I don't think he is qualified now to answer the question.

Mr. MATHEWSON: Yes, I think he is. I think where a man has made a study of that subject and it is part of his business as superintendent, that he is entitled to state what the effect will be, whether it will be to increase the deterioration of mains or not, by the presence of the increased number of electric currents.

302 Mr. BURR: It is on the record here, now, if the Master please, by this witness himself, that these mains are in perfect physical condition, just as good as they were the day they were laid, so that apparently from his own observation there has been no bad or deleterious effect upon the mains from any electrolysis; and as he has testified he has no knowledge which would justify him, in the opinion of the company, acting as an expert, since they employed these other experts, and whatever information he has upon the subject is derived from the experts so employed, I therefore submit he is not qualified as an expert, and cannot express with

any certainty any opinion with regard to the possible or future effect of electrolysis upon the mains.

The MASTER: I am inclined to think you have not qualified him, Mr. Mathewson. I will sustain the objection, but you will have to take his answer, of course.

The WITNESS: Will the stenographer read the question.

Q. (Question read by stenographer:) Will you state, if you can, what the effect on the mains is from an increased amount of electric current in the streets?

The MASTER: That particular question involved to a certain extent a matter of fact, as well as a matter of opinion; it is susceptible of an answer as to a point of fact, and to that extent I think it is proper the witness should answer it, but one of the earlier questions called for simply a matter of opinion, and as to that I think the objection was perfectly good, but I will allow the witness to answer as to his own observation about the increase, as to what he has actually observed himself as to the increase of conditions in
303 the gas mains which he supposes to be the result of electricity or the growth of electricity.

Mr. GANS: That if your Honor pleases, involves a technical knowledge that he has not been proved to have. It may be due to a thousand causes.

The MASTER: I consider he has been qualified as an expert in gas mains, but not as an expert in electricity or electrolysis, but he can state the result of his own observations, as to the conditions of gas mains.

Mr. GANS: Doesn't he state that when he says what he has already said here? He said lately he found some of the mains to be pitted.

Mr. PAGE: In two instances, at the Brooklyn Bridge and in Church Street.

Mr. GANS: That, it seems to me, is all he is qualified to testify to.

The MASTER: All this discussion is immaterial because his answer goes on the record.

Mr. GANS: Exception.

Q. (Question again read by the stenographer as follows:) Will you state, if you can, generally, what the effect on the mains is from an increased amount of electric current in the street?

A. It destroys the mains.

Q. Did you observe any pitting in the mains at the Brooklyn Bridge, before the installation of the electric system on the bridge?

A. No, sir.

Q. Does the elevated railway run through Church Street?

A. Yes, sir.

Q. Did you observe any pitting in the mains at the corner of Church Street before the installation of the electric system on the elevated road?

A. No, sir.

Q. These figures of mains and services were made up to
304 October last by you for presentation to the State Gas Commission?

A. Yes, sir.
Q. And you made these computations?
A. Yes, sir.

Mr. BURR: I should prefer to have you ask how he made them up instead of suggesting the matter to him.
Mr. MATHEWSON: This is such a formal matter.
Mr. BURR: Yes, but continued very long it becomes a little tiresome.
Mr. MATHEWSON: I do not think it will.

Q. Has there been any substantial change in the mains and services since that time?
A. Scarcely any.
Q. Were these mains of the constituent companies which were replaced removed because they were physically deteriorated or because they became too small to meet the requirements of the company?
A. You mean the six original companies?
Q. Yes.
A. Oh, yes, because they were too small.

Cross-examination by Mr. PAGE:

Q. Are you able to state the book value, the value on the books on which those mains and services are carried by your company?
A. Yes.
Q. What is it?
A. It is $7,852,151.03.
Q. In 1902 it became necessary for the first time to make a report to the State Tax Commission, did it not?
A. I believe so.
Q. Were you requested at that time to get up a statement of the mains and services of the company and their valuation, for the purpose of making that return?
A. I was requested to give values of each size of main per foot.
305 Q. Was the purpose for which you were to give those values disclosed to you?
A. It was.
Q. Were the blank that was to be filled out and the questions that were to be answered exhibited to you at that time?
A. No, sir.
Q. Or read to you?
A. No, sir.
Q. If Mr. Carter has so testified on any occasion, he was in error?
A. Yes.
Q. From whom did you receive instructions to prepare this list?
A. A request from Mr. Carter. Mr. Carter came to my office and told me that he had to report to the Tax Commission the value of our mains and services, and asked me to give him some figures as to the value. I gave him the figures from which he computed his total.

Q. He asked you to give him figures as to the value of those mains and services?
A. Yes.
Q. In order that he might make a return to the State Tax Commission; is that right?
A. Yes, sir.
Q. And you prepared such value, did you?
A. Yes, sir.
Q. Did you prepare just one statement of valuation, or did you prepare two?
A. I prepared one; I gave him one set of figures.
Q. The reports contained two valuations, did they not, one of the value of reproduction new, and one the value with depreciation?
A. I really do not know, sir.
Q. You have never seen them?
A. No, sir.
Q. And if it contained a valuation of the depreciation, that was not prepared by you?
A. No, sir.
Q. Is that right?
A. Yes.
Q. Have you the figures that you gave at that time?
A. I think I have; not the total, I do not think I have. I have the figures. The total was made up for me, I think.
Q. Well, was it $4,829,925.82?
A. I am not familiar with the total, because, as I say, I did
306 not give him any statement of values on which to base his calculations. I gave him a price per foot for each size of main, and he from his own books took the mileage of mains and multiplied the number of feet by the price per foot, and made his calculations from that.

By Mr. MATHEWSON:

Q. You suppose that is what he did?
A. I suppose so, yes; all I gave him was a price per foot.

By Mr. PAGE:

Q. You did not make the final computation at all?
A. No, sir.
Q. Have you the figures that you gave him, as to the miles of mains or the number of feet of each particular main, with you now?
A. No, sir, I did not give him any figures. As I stated, all I gave him was the price per foot and he made his computation on that price per foot from his own figures, I suppose. Of course he had charge of the books of the company and he had the number of feet in his possession.
Q. Did he ask you merely for the price at which you could buy pipe, or did he ask you for the value of the mains?
A. The value of the mains.
Q. And services?
A. Yes.

Q. And in response to that request you gave him certain information as to value, did you?

A. I do not think I gave him any value as to services; mains only.

Q. Now, you may state what you gave him at that time as to the value of each class of main?

A. Each size?

Q. Yes, each size.

307 A.—

1½	inch	20 cents a foot.
2	"	23 "
3	"	30 "
4	"	48 "
5	"	60 "
6	"	64 "
8	"	92 "
10	"	$1.10 "
12	"	1.35 "
16	"	1.95 "
18	"	2.30 "
20	"	2.78 "
24	"	3.70 "
30	"	5.65; "

those are all per foot.

Q. You have given here this morning the number of feet of mains of each of those descriptions that are now in use by the company?

A. Yes.

Q. Where did you get that information?

A. Where did I get that information as to the number of feet?

Q. Yes.

A. From my books.

Q. Does your book correspond with the books from which Mr. Carter would have gotten his information?

A. Yes.

Q. Now, we will take the two inch mains; what did you state them to be; what number of feet?

A. How many feet?

Q. Yes.

A. 4,365.

Q. That was as of date October 31st, 1905?

A. Yes.

Q. I show you a report of your company to the State Board of Tax Commissioners for 1905, the year ending June 30, 1905, with a statement of the mains and services of the company brought down to November 1, 1905, and I ask you if you will read from that the number of feet of two-inch mains that were in the possession

308 of your company?

A. 22,826.

Q. Now we will take up the three inch mains; what did you state that to be?

A. 222,741.

Q. Now will you read from the returns to the State Tax Commissioners the amount of these mains?

A. 374,336.

Q. And to bring it down to November 1st, will you make the addition that is indicated below, for three inch mains?

A. The total mains?

Q. No; are there not some more added between June 30th and November 1st?

A. 899 feet.

Q. And that 899 feet would have to be added.

A. Yes, 394,336 feet.

Q. Now we will take the four inch mains; you stated them to be how much?

A. 557,469.

Q. And on the tax returns, how much?

A. 695,632.

Q. And added?

A. 7,767 feet.

By Mr. MATHEWSON:

Q. What is the total now of four inch mains on the tax report?

A. 695,622.

By Mr. PAGE:

Q. Then add 7,767 to that?

—. 703,299, four inch total.

Q. Your five inch mains are stated by you to be how many?

A. 1,799 feet.

Q. And on the tax report?

A. 5,902 feet.

Q. Now we will take the six inch mains.

A. I have 2,129,088 feet. The tax report, 2,113,874, and 15,214, making a total of 2,129,088.

Q. Was not that 15,214 not laid, but taken up in that period?

A. No, sir, laid, according to this (referring to tax report).

Q. I know what it is according to that, but you will observe that the difference between the amount stated in the tax report
309 and the amount stated by you is exactly 15,214; if you will eliminate that 15,214 they will agree.

A. No, the amount in the tax report and the amount on my sheet tally exactly.

Q. It tallies if you do that?

A. Yes.

Q. And the eight inch mains are the same, and that tallies exactly?

A. Yes, I think you will find that the rest all tally. Shall I call off the rest?

Mr. MATHEWSON: Yes.

A. Eight inches, my list——

Mr. MATHEWSON: No, just see if they tally, unless the Senator wants you to give the figures.

A. Eight inches the same. Ten inches, I have 71,386.

Mr. PAGE: Your affidavit states it to be 71,286.

Mr. MATHEWSON: That is a clerical error, I think.

Mr. PAGE: If it is, your total is wrong.

The WITNESS: 71,386; it looks like that. I will look it up in my original records.

Q. The next, according to my figures, where there is a variation is in the twenty inch.

A. I have 178,803.

Q. In the tax report the figure is what?

A. 178,933.

Q. And additions?

A. 179,063, total; that is 130 additions.

Q. If you deduct the 130 instead of adding it to the 178,933, you will get the result that you have, won't you, 178,803?

A. Yes, sir.

Mr. MATHEWSON: In other words, the 178,803 represents exactly the amount that appeared on June 30th in the tax report,
310 does it?

Mr. PAGE: No, if they took up 130 feet of the main that was there on June 30th, then instead of adding 130 feet it would correspond with his statement.

Mr. MATHEWSON: What does the amount appear, June 30th?

Mr. PAGE: 178,933. They have laid since 130. If you deduct that from 178,933, you will get 178,803, which he gives as his statement.

Q. Did you take up 130 feet of 30-inch main?

A. I could not say.

Q. Now, take the 24-inch main?

A. Twenty-four inches, I have 45,956. On the tax report, 39,622, and laid 5,628; 45,241, against 45,956.

Q. Now, your 30-inch mains?

A. My list calls for 131,583. The tax report calls for 131,843.

Q. But if you deduct that 130 instead of adding it to the 131,713, you have the same result as you have in yours, haven't you?

A. Yes.

Q. Did you take up 131 feet instead of laying it in that period?

A. I could not say, sir, and I did not make up these figures in the tax report at all; I had nothing to do with them.

Q. Now, you have given the total number of feet of mains as 4,344,849?

A. Yes.

Q. The tax report gives a total of 4,641,666 as of June 30th, with additions, 43,998 feet?

A. Yes.

Mr. MATHEWSON: And the total?

The WITNESS: Which total do you want?

Mr. MATHEWSON: The total tax report to November 1st, adding 43,987 to what you had up to June 30th?

A. 4,685,664.

Q. Now, will you read from the tax report the present
311 value, reproduced new, of the 4,641,661 feet, first?

A. Present value reproduced new $5,801,466.10.

Q. And the present value allowing for depreciation?

A. $4,398,160.82.

By Mr. MATHEWSON:

Q. That is the tax report of what date?

A. June 30th, 1905.

By Mr. PAGE:

Q. You say that you took your figures of the length of mains in feet from the books of the company?

A. Yes.

Q. Did you see any such figures on the books of the company as have been read off this morning from the tax report, as to the number of feet of mains?

A. I could not say.

Mr. MATHEWSON: His books or records are separate from the records which Mr. Carter keeps.

Mr. PAGE: I thought he said not.

Mr. MATHEWSON: No, he said they were; he said he had his own figures and that the office also had figures.

Q. Is that right, Mr. Simpson?

A. Yes.

Q. Then you have a set of figures as to the number of feet of mains that are in use, and the company or the general bookkeeper of the company has a set of figures?

A. Yes, sir.

Q. And whether they correspond within two or three hundred thousand feet, you do not know?

A. I do know.

Q. Well, do they?

A. Yes; they are compared every month.

Q. Now, in arriving at the value you have given this
312 morning of the mains of the company you will state in the same manner that you did as to the value that you gave Mr. Carter, the value of each size of pipe?

A. I will have to give two values, sir, because I have made my calculation on the basis of 90% new pavement and 10% old pavement. Of course the pipe under new pavement is a good deal more expensive.

Q. I think it would be very interesting if we could get one or two more values of these things, so you may give it.

Mr. MATHEWSON: We have only one value.

Mr. PAGE: We have three now, one for taxation, another on the

books of the company, and another for increasing the cost of gas. Now, if we can get another one, why let him give it.

The WITNESS: Inch and a half—the larger figure is for pipe laid in new pavement and the smaller one for pipe laid in old pavement.

1½	inches	$1.14	and	$	.29
2	"	1.19	"		.34
3	"	1.42	"		.42
4	"	1.53	"		.53
5	"	1.64	"		.64
6	"	1.74	"		.74
8	"	2.18	"		1.02
10	"	2.45	"		1.29
12	"	2.78	"		1.62
16	"	3.63	"		2.31
18	"	4.09	"		2.77
20	"	4.93	"		3.46
24	"	6.45	"		4.65
30	"	9.55	"		7.58

Q. Now, as I understand the first figure given by you or the first column of figures is an estimated value based upon the supposition that 90% of the streets of New York have been laid with asphalt, belgian block on concrete, belgian block on sand, asphalt block or wooden block pavement?

313

A. Yes, sir.

Q. Is there any difference between the cost of laying a main in a street that has an asphalt pavement and a street that has belgian block on sand?

A. Is there any difference in cost?

Q. Yes.

A. No, it would be about the same, that is, in these pavements relaid by the city, the cost of paving would be about the same. The city charges $3 a yard for belgian block on sand. There is only one street in New York where they have it.

Q. What street is that?

A. Part of Ninth Avenue, from 59th Street North, Columbus Avenue. We pay there $3 a yard. That is for granite block on sand, not belgian block.

Q. Can you state the number of each kind of mains that are now in existence that were taken over by the Consolidated Gas Company from the constituent companies in 1884?

A. I cannot state offhand. I can get it from my notes, I suppose.

Q. You testified that more than half of the present mileage was new?

A. Yes, sir.

Q. That would refer to the additional construction which you have made, which would be 212 miles, and the two, three and four inch mains that you have taken up, which you state to be 222 miles?

A. Yes.

Q. The large pipes that are now in use were largely laid, were they not, before the consolidation?

A. No, sir.

Q. How many pipes have you on Third Avenue?

A. Consolidated?

Q. Yes.

A. On what part of Third Avenue?

Q. From Grand Street to 129th Street.

314 A. I will have to take it in sections, because it is in different districts.

Q. Give the number of pipes and the size of each pipe. Have you a map of your distributing system showing the number and size of the mains on each street?

A. Yes, sir.

Mr. PAGE: Why cannot we have that produced?

Mr. MATHEWSON: Perhaps you can. I do not see that it will do you any good, Senator, would it?

Mr. GANS: It might not do us any harm; we might try it.

Mr. MATHEWSON: We have testified already that we have pipes in every open street in New York City, but the mileage of pipes would not appear from that. You would merely see a picture. I do not know how bulky a thing it is.

The WITNESS: It would weigh about a quarter of a ton.

Mr. MATHEWSON: Mr. Simpson says it would weigh about a quarter of a ton.

The WITNESS: You know the insurance volumes? They are enormous volumes. There are twenty-two volumns and they are about that big square. (Indicating.) They have to be on a large scale, you know. Are you ready for my answer?

Q. Yes.

A. These are Consolidated Gas Company mains only.

Q. Yes.

A. Between Grand and 34th Streets, one 20 inch, one 16 inch and two 6 inch mains; 34th Street to 79th Street, two 16 inch, a 6 inch and an 8 inch; 79th Street to 129th Street, 16 inch part of the way and 12 inch part of the way, and an 8 inch and two 6 inch mains.

315 Q. On this same avenue are there mains of other companies controlled by your company?

A. Yes, sir—Oh, I don't know about controlled by our company. There are mains of other companies.

Q. Well, we will state, then, are there mains of the Standard?

A. There are on part of the avenue.

Q. And mains of the New Amsterdam?

A. There are; yes, sir.

Q. Any mains of the Mutual over there?

A. Yes, sir.

Q. Are you sufficiently familiar with that condition to state the number and size of the mains of these other companies that I have named on that street?

A. I can come very near it.

Q. Well, proceed.

A. I may not give you the exact sizes, but will come as near as I can to it.

Q. Well, you got it down to four inches on your direct-examination?

A. The Consolidated. I can give the number of mains, but whether I can give the exact size offhand or not, I don't know. The Standard have on each side one 10-inch and one 8-inch, from Thirteenth Street to 129th Street. The Mutual has a main on each side the entire length up to Sixtieth Street; nothing north of Sixtieth Street.

Q. From Grand Street to Sixtieth Street?

A. Yes, sir. The New Amsterdam has three mains all the way from Broome Street to 125th Street.

Q. How wide is Third Avenue?

A. Third Avenue is sixty feet from curb line to curb line.

Q. Are those mains of yours laid parallel to each other?

A. Yes, sir.

Q. Or are some above the others?

A. Some overlap.

Q. And do you say it would be impossible by any system of readjustment of those mains to lay a trunk main that would carry a quantity of that gas that is already carried in these small pipes?

316 A. No, I say it would be impossible without readjustment of pretty nearly everything down there, not only the gas mains but the water mains and subways and elevated railroad columns that take up a good deal of the street, and the sewers and underground trolley tracks taking up a great part of the streets and the subway ducts for the underground trolleys, besides the telephone and the electric light subways.

Q. What depth do you lay your gas pipes?

A. We try to lay at a depth between 3 feet 6 inches and 4 feet, and the pipes average between 2 feet and 4 feet. Very often we cannot go down as low as we want to.

Q. Do you know at what depth they lay the water mains?

A. They try to maintain a depth of six feet, but generally run them about five feet.

By Mr. MATHEWSON:

Q. Is there any municipal regulation as to the depth to which you must lay your pipes under-ground?

A. Only that they shall be laid at least 18 inches below the surface.

Q. How deep do you have to lay them to escape frost?

A. I say that we try to lay them from 3 feet 6 to 4 feet but we cannot do it except in very few cases in Manhattan.

By Mr. PAGE:

Q. Now, as I understand you, you testify that First, Second, Sixth, Seventh, Eighth, Ninth and Lexington Avenues are in a worse condition than Third Avenue?

A. Yes, sir—no, I did not say worse condition than Third Avenue. That is a mistake on your part.

Q. Well you said on Third Avenue there would not be room for a four-inch pipe and on Eighth Avenue and the rest you said there would not be room for any?

317 A. I said even for a four-inch main. I meant to express the idea there would not be room even for the smallest size pipe.

Q. As a matter of fact, Third Avenue is one of the most congested avenues so far as pipes are concerned outside of Broadway?

A. Not a bit more than Second Avenue or at the present time First Avenue or Broadway or Eighth Avenue or Ninth Avenue; in fact any avenue running north and south in the city to-day is entirely filled up with pipes, with the possible exception of parts of Eleventh Avenue and Tenth Avenue, and those avenues are broken up by the New York Central Railroad at 32nd Street; Eleventh Avenue is entirely cut off there at 32nd Street by the yards.

Q. Now, all of these mains that you have stated running from Grand to 129th Street, are they continuous mains?

A. Practically continuous.

Q. Do you draw for the services in each district from each of the mains?

A. Yes, sir.

Q. So that from Grand Street to 129th Street, on each block there is drawn from each of these mains that you have specified to supply consumers on that block?

A. Yes, sir.

By Mr. MATHEWSON:

Q. Are the mains all on one side of the street or on opposite sides?

A. On opposite sides. There are two mains of each system, one main of each system on each side of the street.

By Mr. PAGE:

Q. When did you make this observation at the Brooklyn Bridge where you said that you observed some effect from electrolysis?

A. About a year and two months ago.

318 Q. When was your last observation made of those pipes prior to that time?

A. At that particular place I could not really say.

Q. Just where was that?

A. It was right under the bridge, on, I think it is South William Street, that goes through right under the bridge under that arch. It was before the entrance of that wine store, in front of the doorway of that.

Mr. BURR: That is almost at Gold Street, is it not?

The WITNESS: Yes, sir. That is one case, and another case two years ago right in front of the Brooklyn Bridge, right in front of the Park Row entrance.

Q. And what was your idea as to where the electric current came from that caused that pitting of the pipes at that place, I suppose it was?

A. Yes, sir, I presume from the Brooklyn Bridge.

Q. Why do you presume it came from the Brooklyn Bridge?

A. Well, on account of the locality of the pipes to the bridge, in connecting with the bridge practically.

Q. And your idea is then that the electric current entering the pipes at that point caused the pitting, is that it?

A. No, the current leaving the pipe at that point caused the pitting.

Q. Well, you do not supply electric current to the bridge from your gas pipes, do you?

A. No, but electrolysis is not caused by the current going into the pipe, but is caused by the current leaving the pipe.

Q. That is the pitting is caused by the current leaving the pipe?

A. Yes, leaving the pipe.

Q. Where are the power houses that run the Brooklyn bridge cars?

A. I don't know, I have no idea.

Q. They are in Brooklyn, are they not, generally?

A. I think so.

319 Q. And don't you know that the electrolytic condition is caused by the current seeking to get back to the power house or to its source?

A. That is exactly what I said. It is the current leaving the pipe, going back to where it came from, that caused the pitting. The current was caught up by our pipe and went back to where it came from and jumped from our pipe to the structure.

Q. Is it your idea that the electric current then would leave the structure of the Brooklyn bridge, jump down into your pipe and jump up into the bridge again immediately?

A. No, sir; but the electric current can come across the river or from the bridge or some other place and follow along the ground and follow our pipe and then take the best place to go back.

Q. Do you know from observation as to the electric currents, the stray currents that come from the bridge, as to how they do travel? Have you made any study of that?

A. No, I have not, no particular study.

Q. Then the only other observation you have made is at Church Street, Church and where?

A. Church and Spring. In that case I was called to look at this place and told that our main there was being damaged by electrolysis, and I notified Mr. Maxwell, an electrical expert, who made a test there and found a current of over three volts leaving our——

Q. I think we will let Mr. Maxwell testify, if they will produce him.

Mr. GANS: I move to strike out what Mr. Maxwell found.

The WITNESS: Well, I found the pipe pitted.

Q. How thick are these pipes of yours?

320 A. It depends on the size entirely. They are in thickness all the way from three-eighths of an inch to an inch and a quarter and an inch and an eighth.

Q. Three-eighths of an inch would be the thickness of the inch and a half pipe, would it?

A. No, that is wrought iron.
Q. What?
A. The inch and a half.
Q. The inch and a half pipe, are they wrought iron?
A. Some are wrought iron and some are cast iron. The three inch pipe and four inch pipe would probably be about three-eighths of an inch in thickness; the six and eight inch would range about half an inch; the larger sizes up to 36 inches would range from one inch to an inch and a quarter and an inch and an eighth.
Q. Do you know whether there is any difference in the attraction for electricity in cast iron pipe or wrought iron pipe?
A. Do I know what?
Q. Whether there is any difference in the attraction for electricity in a cast iron pipe or wrought iron pipe?
A. No difference in the attraction, no, sir.
Q. That is, the electric current would seize on a cast iron pipe just as quick as it will on a wrought iron pipe?
A. A wrought iron and cast iron, one is as good a conductor as the other, I think; there might be a slight difference in favor of the wrought iron being a better conductor.
Q. Mr. Simpson, you remember testifying before the State Commission of Gas and Electricity.
Q. And do you remember that this question was asked you by Mr. Mathewson: "Will you look at Exhibit 165, at the bottom of which appears, 'for mains $4,829,925.82'?" And Exhibit 165 is shown you (handing book). Then this further question was asked: "Do you know whether you made up those figures or figures in the
321 preceding report corresponding?" and did you answer, "I did"?
A. I don't remember. May I see the book?
Q. Certainly.
Mr. MATHEWSON: What page?
Mr. PAGE: 1554.
The WITNESS: You will find in another part of the testimony, Senator, the very question that was brought up this morning where Commissioner Shedden asked me that very thing, whether I made up the figures, and I told him I did not. I gave the computation to Mr. Carter.
Q. I am calling your attention to this particular time. Do you remember so testifying on direct-examination in response to Mr. Mathewson?
A. Was it the commencement of my examination?
Q. Yes, it starts there: "Colin C. Simpson, being duly sworn, testified as follows, Direct-Examination by Mr. Mathewson."
A. All I can say is that that statement—I meant there that I gave the figures from which Mr. Carter's total was computed, that is what I thought.
Q. Well, you so testified at that time, didn't you?
A. Before the Commission I testified that I gave Mr. Carter——
Q. Did you answer the question that I have read to you from the record in the manner you are set down in the record as having answered it, by stating "I did?"

A. I suppose I did if it is in the record.

Q. And as to the next question, "will you state what your method or upon what basis those figures were produced?

A. I took the mileage of the various sizes of mains we had at that time and computed the total amount, taking the cost of laying each size of pipe under the most favorable conditions. I did it for taxation purposes, and I thought those were the right kind of conditions to take. I did not figure any rock, city inspection, engineer-
322 ing expenses, clerk expenses, wear and tear of tools and plant, superintendence or any matters of that kind." Did you so answer?

A. I must have so answered, I guess.

Mr. PAGE: It is five minutes past one. I think I am through, but I would like to consult with my associates before stating that I am through.

Mr. BURR: May I call your Honor's attention to the fact that I omitted part of my motion in regard to striking out the testimony of Mr. Bradley yesterday. I move further to strike out all the testimony which he gave regarding the cost and expenditures and values of the Astoria plant for the reason that it appears that he was not testifying from the best evidence or books of original entry but from statements furnished him by the financial department of the company; and a further reason, that it appeared from the testimony of the witness that the expenditures stated by him as being made at the Astoria plant are unnecessary and uncalled for and the plant contemplated to be erected there will not be required or necessary to supply the demand in the Boroughs of Manhattan and the Bronx for from ten to twenty-five years to come.

Mr. MATHEWSON: I merely wish to state that I think Mr. Burr is in error in supposing that Mr. Bradley said that he did not know these figures and facts himself. On the contrary, he stated he did, according to my recollection.

Adjourned to 2:15 P. M.

323 After Recess.

COLIN C. SIMPSON resumes the stand for further examination by Mr. Page:

Q. In the tax report the number of services are placed at 86,902, and then there is a decrease from June 30th, 1905, to November 1st, 1905, of 564; have the number of services decreased?

A. Yes, sir, they might have, I wouldn't say until I look in my statement here. We had on October 31st, 86,338.

Q. Well, that would be just the number, if you deduct 564 from 86,902?

A. Yes, sir.

Q. So there was a decrease in the services from June 30th, 1905, to November 1st, 1905?

A. Yes, sir; in our overhauling, you know, we cut off all unnecessary services.

Q. Are the services included in the valuation given of $5,801,466.10 in this tax report?

A. I really couldn't say, I don't know anything about that tax report or how it was made up.

Q. You will notice that schedule K of the tax report has the same figure, $5,801,466.10 in the column headed "Present value of property in streets, highways and public places, on the basis of cost of reproduction, new?"

A. Yes, sir.

Q. And there is no separate statement of the value of services?

A. No, sir.

Q. And that also under the heading of "Present value of property in streets, highways and public places, allowing depreciation," is the $4,398,160.82 that was contained on the last page of the tax report to which your attention has been heretofore directed?

A. Yes, sir.

Q. Now are you able to state whether the price of mains has decreased since 1884?

A. No, sir, it has increased. You mean the price of labor and material?

324 Q. No, I said the price of mains; I am not asking now for the value of mains in the ground but the price of mains, if you go to purchase them.

Mr. MATHEWSON: Pipes.

Q. Pipes, cast-iron pipes of the size of these mains?

A. Do you mean the cost of purchasing them has increased, or laying them?

Q. If you had to buy a main to-day, could you get it cheaper in the market than you could in 1884—the same main?

A. No, sir, we would have to pay more for it.

Q. Do you mean to say that a cast-iron main costs more to-day than it did in 1884?

A. Yes, sir.

Q. How much?

A. The price of pipe in 1884 was twenty-five dollars and something a ton—I will give you the right figures. In 1885, as near as I can get to it, the price of pipe was twenty-five dollars and fifty cents, and in December, 1905, it was twenty-eight dollars and ninety cents, a difference of three dollars and forty cents per ton of pipe. Labor has increased now close to 20 per cent., you might say 20 per cent., in some case 25 per cent.; 20 per cent. would be a fair round figure of the additional cost of labor.

Q. And in estimating the value of these pipe- you took the price of to-day?

A. In estimating the value I gave to you before?

Q. Yes.

A. Yes, sir.

By Mr. MATHEWSON:

Q. That is, you mean the twelve million six hundred thousand dollars and over?

A. Yes, sir. Those prices I gave of pipe I would say are not the prices of the pipe delivered on docks, not the purchasing price of the pipe, but the cost of the pipe stacked in our yard. Of course
325 it is delivered on the docks and carted to the yard and then stacked up. Those prices are the prices stacked in the yard.

By Mr. PAGE:

Q. Do you have in your department a book or books that would show the mileage of mains when laid and the cost of laying?

A. No, sir, I have not.

Q. What have you got?

A. We have got books of record of all the mains that we have, but a great many of the mains were laid prior to consolidation and the different books were turned in to me and the new records made from these old books and of course there was no cost at all in them.

Q. You do not keep any books then that show the cost of the production?

A. I keep my own books, which show the cost of the mains, as far as my department is concerned; that is, the actual labor and material expended by my department.

Q. Where would you have to go to get the remaining portion of the cost of laying a main?

A. I don't believe there are any books at all which show the cost of the mains which were laid prior to consolidation.

Q. No, but I am talking about those you have laid since consolidation?

A. In the accounting department they have the cost of those, the total cost.

Q. But from the books you have you could tell how much of each size pipe was laid, the time when it was laid, and the amount expended by the company in labor and material, other than for the pipe itself?

A. I don't think I could, sir. I could give you the mains we laid since consolidation and the cost for the last few years, of those mains, but up to a few years ago I kept no cost record at all in my department, and keep it now only for my own knowledge; it is supposed to be kept in the accounting department.

326 Q. For how many years would such a record in your department cover?

A. I should think probably seven or eight years.

Q. Well, for the period then for the last seven or eight years it would show us the cost of the main in the ground, wouldn't it?

A. It would not; it would show the cost of the labor and material, and the cost of rock; outside of that it would not show the cost. The engineering expenses, supervision, clerical expenses, the cost of wear and tear on tools and plant are not included.

By Mr. MATHEWSON:

Q. How about inspecting?

A. That is not in there. The suits for damages, which are very frequent, you know, and all such things as that are not in there at

all; I keep it for my own guidance, to see what my part of it is costing.

By Mr. PAGE:

Q. Well, you could produce such book or books as you have, showing whatever they do that you have in your department, couldn't you?

A. I could.

Q. Well, will you do so?

A. I will, sir, if counsel says so.

Mr. PAGE: He says he will if counsel says so.

The WITNESS: That is, I have those figures in that book, the figures all made up until December 31, 1904; the figures for 1905, the data has not been entered, but the mains are all entered up, and we concluded it would be better in the accounting department for my figures to be the same as the accounting department figures; that is, the cost should tally with theirs, my costs and their- should be the same. I want to have all the information as to what the total
327 cost was, and I can take their cost and add my cost to it, and therefore the year 1905 I do not think is all figured up yet.

By Mr. GANS:

Q. But you have the original entries in your department?

A. Yes, the original books are there, when the mains were laid and where and so on.

Q. And such items as you were accustomed to keep as to the cost of laying them?

A. Yes.

Q. And those can be produced from your department if counsel so advises?

A. Yes, sir.

Mr. PAGE: Now can we have the benefit of advice of counsel on this subject?

Mr. MATHEWSON: Oh, I think so. If you really think you want it, I think I can arrange for it, Senator. I want to see what they are, I don't know what the books are and know nothing about them, how bulky they may be or what they may contain.

By Mr. PAGE:

Q. Now, as to mains that were laid prior to consolidation, have you a record now in your possession which shows which of the mains in use were the property of each of the constituent companies?

A. Yes, sir, I think we have.

Q. Is that in your possession?

A. Yes, sir.

Mr. MATHEWSON: Of the mains now in use belonging to the constituent companies?

Mr. PAGE: Yes, we would like to have that produced also.

The WITNESS: It is not totalized at all, you know. We have a book of the mains, a record of the mains by streets. Now for in-

stance take Twenty-third Street, we keep a list of all the
328 mains on East and West Twenty-third Street, and it would go according to the sides of the street, first the North side and then the South side of the street, and there would be a memorandum afterward as to which company it belonged to—the Metropolitan or Municipal or Manhattan or whatever it was; of course they will have to be picked out. We know how much each company turned in at the time of the consolidation but since that time we have taken up mains and we paid no attention whether they were Municipal or Metropolitan or otherwise.

By Mr. MATHEWSON:

Q. But the question addressed to you is whether you can state which of the mains in use belonged to each of the six original companies?

A. You can only do it by going through every item in the books.

Mr. MATHEWSON: I do not know how much of a job that would be, I am sure.

The WITNESS: I could not do it. I am familiar with that kind of work and I know I could not do it in less than a month of steady work, ten hours a day. You see at the time of consolidation they were all turned over to the Consolidated Company; the Manhattan turned over so many million feet of main and so many feet of each size, the Metropolitan turned over so many feet of each size, and they were all put together. Now since consolidation we take up a thousand feet of 6-inch main and we do not specify whether it is Metropolitan or Manhattan we take up; we simply take up one thousand feet of Consolidated main.

Q. You would have to pick back in each instance to ascertain whose they were and how many were left.

A. Yes, sir, and it is almost impossible.

Mr. PAGE: Until you can have for us the record which
329 the witness has promised to give, I will suspend the cross-examination.

The WITNESS: What books am I to produce?

Mr. MATHEWSON: You were asked to produce the record of your department showing your expenditures for mains in the last few years. What they are I do not know; therefore, I cannot define them any more particularly.

The WITNESS: As I say, I have not the exact cost made up for the year 1905.

Mr. MATHEWSON: So I understand.

The WITNESS: Is that the only book then?

Mr. MATHEWSON: I understand so.

The WITNESS: That is the only book for the present?

Mr. PAGE: Yes.

Cross-examination by Mr. BURR:

Q. In 1884, where were you employed?

A. In what part of 1884?

Q. Well, we will take the month of September, 1884.

A. I was the Superintendent of mains for the Municipal and Knickerbocker Gas Companies.

Q. How long had you been such superintendent?

A. Since 1881.

Q. Prior to that time what had been your occupation?

A. I had been one year in the works of the company.

Q. And prior to that?

A. I was laying water mains in Vienna, Austria, for four years.

Q. You went to London from Vienna?

A. I went from London to Gratz and from Gratz to Trieste,
330 and from Trieste to Vienna; I was between that time in Gratz and Trieste.

Q. Did you take control of the mains of this company when you arrived here?

A. No, sir.

Q. What did you do then?

A. I went into the works of the company.

Q. And after you had been there a year, you took charge of the mains?

A. No, I was in the works for a year and in the office for a few months, about 6 months, and then took charge of the mains.

Q. When the mains of the constituent companies of the Consolidated Gas Company were taken over, did you make an examination of them?

A. No, sir, I did not.

Q. Do you know who did?

A. I do not.

Q. Do you know if any examination was made of them?

A. I could not say.

Q. How soon after the date of the consolidation of the constituent companies into the Consolidated Gas Company did you take active control of the mains?

A. I took control in 1889, in May.

Q. And between 1884 and 1889, did you make any inspection of the mains which had been turned over to the Consolidated Gas Company by the constituent companies?

A. No inspection; I had control of the district between 23d and 79th Street and east of Fifth Avenue and I had charge of the mains in that district for the Consolidated Gas Company.

Q. You know, I presume, that mains had been laid by the Municipal as long ago as 1823?

A. By the Municipal? The Municipal only started in 1876.

Q. Well, by the New York Gas Light Company?

A. Yes, about that time.

Q. How many of those mains are still in existence and in use?

A. Really I could not say just how many; of course they commenced laying mains in 1823, and they had mains laid at the time
of the consolidation, but how much of it was laid prior or
331 as late as that I do not know; I have inspected some of the mains that were taken up that had been laid in 1846.

Q. Well, you had occasion to examine mains laid as long ago as 1823, hadn't you?

A. I could not say as to the date the mains were laid. I had one case where a pipe was brought to my office, a main laid about 1846, as shown by the records; but any other specific dates I could not say anything about.

Q. Then you are unable to say how many miles of mains are now in existence and in use which were laid in the streets of the City of New York prior to 1823?

A. I am.

Mr. MATHEWSON: None were laid prior to 1823, Mr. Burr.

Mr. BURR: If the witness will say that, I will take that as his answer.

Q. Do you know that none were laid prior to 1823?

A. I will not say positively; I am not certain as to dates.

Q. Do you not know that there were mains laid by the New York Gas Light Company about that time?

A. I do not know; I could not say. I am not so old a man as that; I cannot state as to that time. I know from hearsay that the New York Gas Light Company was in existence and had mains in the ground about 1823; more than that I could not say.

Q. The Consolidated Gas Company took over the mains of the New York Gas Light Company, the Manhattan Gas Light Company, the Metropolitan Gas Light Company, the Municipal Gas Light Company, the Knickerbocker Gas Light Company and the Harlem Gas Light Company; is that correct?

A. Yes.

Q. Then, in addition to the mains of these companies in the streets of the City of New York, to your knowledge there are
332 still in existence and in use the mains of the Standard Gas Light Company, the New Amsterdam Gas Light Company and the Mutual Gas Light Company?

A. Yes.

Q. Is there any other company operating in the City of New York?

A. Yes.

Q. In the supplying of gas?

A. Yes.

Q. What company?

A. The Central and Northern Union.

Q. That is in the Bronx.

A. That is in the City of New York, is it not? Do you mean now Manhattan, by the City of New York?

Q. I said City of New York, and you stated that the Northern Union operates; and I say, in the Bronx?

A. In the Bronx, yes, sir. Then the Bronx Gas and Electric Company operates in the Bronx; those are all. Then in Brooklyn there are the Brooklyn companies, and in Staten Island there are the Staten Island companies. Then there is the East River Com-

pany of Long Island City, and there are a great many small companies all through the Borough of Queens.

Q. But in the Borough of Manhattan there are no companies for supplying gas other than the companies I have named, are there?

A. No, sir; that is the Consolidated, the Mutual, the New Amsterdam and the Standard.

Q. And the mains of all those companies are under your observation and you have the management of them?

A. Yes.

Q. Does the character of the sub-soil affect the mains?

A. I have never found it—do you mean a cast iron main?

Q. Yes.

A. I have never found it to physically affect a cast iron pipe.

Q. What is the character of the ground in the northern
333 part of New York? I mean in the northern part of the Borough of Manhattan?

A. In what way do you mean—character?

Q. Well, is it of rocky formation or soil formation?

A. Yes, there is a great deal of rock in the northern part of the city.

Q. And you say that in Third Avenue the surface of the street, or just below the surface, from curb to curb, sixty feet, is practically occupied by the mains of the companies that you have named?

A. I said entirely occupied by the mains of the companies I have named and other sub-surface structures, such as telephone or telegraph subways, the ducts for the Metropolitan road, the water pipes, the sewers, and the columns of the elevated railroad, which take up a great deal of the ground underground, and the ducts of the trolley lines.

Q. And, as a matter of economy in the operation of the mains, if it could be done, one single large main to do the work of these various gas companies would be preferable, would it not, to the number of mains that are now in the streets?

A. Not as things are at present.

Q. What do you mean by that?

A. Because each main is on a separate system; there are not two mains on one side of the street going from one system.

Q. Do you mean that each of the constituent companies of the Consolidated Gas Company have different systems?

A. Yes.

Mr. MATHEWSON: I do not think that you should use the word "constituent" companies, because I do not think they are. I think it is confusing. The constituent companies of the Consolidated Company were the six companies which formed it, but those present companies are not the constituent companies, as I understand the
term, of the Consolidated Gas Company. It owns stock in
334 some of them; I think in all of them.

Mr. BURR: Well, I am asking him now particularly with regard to the six companies which were originally consolidated into the Consolidated Gas Company.

The WITNESS: That is what I understand Mr. Burr was asking about, these companies.

Mr. MATHEWSON: I thought you were referring to the present companies.

The WITNESS: I am talking about the present companies.

Q. They have each a different system?

A. They have each a different system with the exception of the Harlem and the Knickerbocker systems north of Seventy-ninth Street, which are consolidated.

Q. What obstacle is there in the way of having the systems of these six companies made uniform?

A. It would take an enormous amount of tearing up the streets and it would take a great deal of time and would cause a great deal of expense.

Q. Which do you value most, the time or the expense?

A. Well, I don't know as to the time or the expense, or as to the inconvenience to the public, having the streets torn up from end to end for quite a long time.

Q. You would not have to tear up all the streets at one and the same time?

A. You would have to tear up a great many of them, and if I did not have a big force of men working I would never get finished.

Q. Such big force of men being conceded, and the discomfort, whatever it may be, conceded, it is preferable to have the systems made uniform, is it not?

A. Yes, unquestionably; it is possible, but I do not think it is practicable.

335 Q. And with regard to the Standard, the New Amsterdam and the Mutual, have they each a different system also?

A. Yes.

Q. Those are the companies that you understand are controlled by the Consolidated Gas Company?

A. I have not anything to do with that at all.

Q. You have nothing to do with their control, further than to manage their mains, as you have testified?

A. To look after their mains, yes.

Q. You have not, during all the time that you have stated, been engaged in any respect as an electrician, have you?

A. Never, sir.

Q. You do not claim to be an electrical engineer, do you?

A. No, sir.

Q. You do not claim to be able to say with authority the possible consequences of electrolysis upon any given body, do you?

A. I think I can, yes.

Q. Do you mean to say that you claim to be an expert in that regard?

A. I can have knowledge of a certain subject without claiming to be expert on it.

Q. So that you have no expert knowledge?

A. No, sir.

Q. Therefore the opinions which you have ventured to express

are opinions such as might be given by any man who had made observation of the conditions of the mains?

A. No, sir, it would be the opinion of a man who knew something about it.

Q. About the mains?

A. About the effect of electrolysis on the mains.

Q. When do you proceed to repair or take up mains, and for what reason?

A. In the first place we strip, as I said, or overhaul, as we call it, every main on every street that is to be repaved, and every time it is repaved too. And if we think any main is too small for the supply on that block, or the supply on that street, it is taken up and replaced by a larger one.

336 Q. Who informs you as to the lack of proper size of mains to carry the supply?

A. I get that from the complaints about the pressure on that street.

Q. Does that go to the engineering department first?

A. It is reported sometimes to me direct and sometimes to the shops. The shops report any complaints that come in about lack of pressure. They are turned over to me for investigation, and if I find that the complaint is due to a main of insufficient size, I ask to have a larger main laid on that street.

Q. So that the size of the mains has all to do with the character of the pressure?

A. In a certain degree it has. If you have a block 800 feet long, and that block is entirely built up with buildings, with stoves and all that in them, a three-inch main will be too small, but if it was not so much built up, it would be ample. It depends on how much the main has to carry.

Q. Would you put it down as an engineering maxim—the larger the main the larger the pressure?

A. No, sir.

Q. Would you say it would be less variation in pressure?

A. No, sir; there is a difference between pressure and capacity of delivery. A larger main would deliver more gas than a small one.

Q. Where there are a number of mains of different sizes, I mean, you cannot regulate the pressure as well as you could if there was one large main, can you?

A. It would depend entirely upon the consumption off the large main, and other conditions, such as elevation, etc. On a large or a small main the pressure would increase or decrease just the same, as the pressure was taken off or put on.

Q. You made an examination, I understood you to say, of the mains at two certain points, one at Brooklyn Bridge and another at some place in Church Street, I think it was?

A. Church and Spring Streets.

337 Q. At what particular point did you make the examination near the Brooklyn bridge?

A. I said I think the street is North William Street. It is the street that comes under the bridge and goes into Luyties' wine cellar, opposite the door of his wine cellar.

Q. Will you describe at that particular point the location of the different pipes or mains you found there?

A. I only found one main there, because we only have one. That main was on the west side of the street, about—between four and five feet from the curb.

Q. What was the size of that main?

A. Four inches.

Q. When had that main been placed down in the ground?

A. I cannot say offhand, sir.

Q. Would that be shown by your books?

A. If it was laid prior to the consolidation it would not.

Q. Then you have no record of the age of the pipes laid before consolidation?

A. No, sir.

Q. And when you stated, in response to the question of Mr. Mathewson, that the mains were all in perfect condition, you embraced in that general statement all the mains that had been in existence in 1884 and that still remained?

A. Yes.

Q. And that you were able to make as a positive statement from the result of your observation?

A. From the result of my seeing. As I said before, since I have been General Superintendent of the company we have overhauled over 90 per cent. of our main system. We have also laid a great deal of new mains on streets newly paved, and every foot of those mains newly laid, or overhauled, I saw, or practically all. It has been part of my business to see what has been put down in the streets in my district, and I see to it from one end to the other, practically all day long, and have done it practically for seventeen years.

338 Q. I judge from what you have testified that there is a vast network of mains all over the City of New York under every open street in the City of New York?

A. What do I understand by an open street?

Q. Every street that is actually opened?

A. Yes, there is.

Q. Is not that the statement that you made, that every opened street is occupied by mains?

A. I did not make that statement, but it is so.

Mr. MATHEWSON: Mr. Bradley stated that he believed that there was a main in every open street in New York.

The WITNESS: There is, on every street in New York City, on Manhattan Island, with the exception, possibly, of a few unpaved or ungraded streets uptown in the far end of the Island.

Mr. MATHEWSON: And they are probably not open, as Mr. Burr uses the term.

Mr. BURR: I do not mean technically open, but actually.

Mr. MEAD: Physically.

Mr. BURR: Yes, sir.

Q. And it is part of your duty, is it not, to keep a record of what work is done upon every main in every such street?

A. Yes, sir.

Q. And for that purpose you must have a very accurate record of the work that is done upon such mains?

A. It is not kept in detail in the way you mean. I get the pay rolls every week and it is entered up in the pay roll what is expended for new mains, repairs, overhauling and so on, subdivided under those headings.

Q. I understood you to say you had a map showing ac-
339 curately the whole system of mains in the city of New York?

A. We have maps showing the entire system of mains on the Island of Manhattan belonging to the Consolidated Gas Company, one system of maps.

Q. And have you another system showing the mains of the other companies?

A. We have copies of maps of theirs, or of maps we made ourselves before the other companies were consolidated.

Q. So taken together for your proper information you have a complete record through these maps of every main in the streets of the city of New York?

A. Yes, sir, every gas main.

Q. Every gas main, that is the only main I am speaking of.

A. Yes, sir.

Q. Where is that series of maps?

A. In my office.

Mr. MATHEWSON: Those were the ones that weighed a quarter of a ton, that Senator Page asked me about.

Q. Does that map show the date of the putting down of each main since 1884?

A. No, sir, no dates at all.

Q. In order to understand that map one would have to possess the book which you have with this accurate record you spoke of?

A. No, not to understand it. If you wanted to get the distance from the curb and the depth you would have to have the book.

Q. Suppose one wanted to know what its present physical condition was, how old it was and how long it had been used, where would you seek that information?

A. That I really cannot say, the books would not even tell you that.

Q. By what are you guided then in seeking to ascertain if pipes are worn out or defective?

A. The general principle we have gone on is to take every street before it is paved and examine it, whether we know that they
340 are new mains or old mains, mains and services; and in doing so in the last seventeen years we have covered 90 per cent. of the streets of New York. Added to that Second Avenue, which has never been newly paved, we overhauled that in its entire length, and Ninth Avenue we overhauled the greater part of it and that has never been newly paved. A great many of the streets, the few of the other streets that are not newly paved, on several of those we have taken up the mains and laid new mains, and so in reality there have been more than 95 per cent., I do not think there is 5 per cent. that we have not gone over.

Q. Certainly you must have encountered some of the mains that were laid at the time of the New York Gas Light Company?

A. Probably we did.

Q. From mere observation you would be able to tell that, wouldn't you?

A. Not at all.

Q. Then a main that was laid in 1823 might still be in perfect condition at the present time?

A. Certainly it might.

Q. And in this record that you have, does that contain the character of the subsoil in which the main is laid?

A. No, sir, nothing at all.

Q. How then do you arrive at the basis of expense or cost? Is the cost of laying mains uniform throughout the city of New York?

A. Oh, no.

Q. What causes variation in cost?

A. Well, a great many things can enter into it.

Q. Tell us some of them?

A. The kind of pavement; you might encounter rock; you might encounter bad soil, filled-in soil, which is loose and requires scraping and sheathing to keep the banks up. You might in one case have to go two feet and in another five feet. You might be laying mains up in Harlem where there is no traffic at all, or in Wall Street or Nassau Street, where there is a great deal of traffic, and it would cost a great deal more to lay it. A great many things enter into the difference in cost.

341 Q. Do you do the work yourself, I mean does the company do the work itself, or does it let it out in contracts to others?

A. In nearly every case except in a few cases of large jobs, as you may call them, we do the work ourselves; we lay all mains under 30 inches in diameter ourselves, practically all.

Q. Do you purchase the material?

A. The material is purchased by the purchasing agent.

Q. What does the material used in laying mains consist of?

A. Cast iron pipe, lead and yarn, principally.

Q. Pipe, lead and yarn?

A. Yes, sir.

Q. Is that all?

A. About all. Of course we have to use blocking, for blocking up the main, and use sand for repaving, and there is a little fire clay for snakes in making up the joints.

Q. In your testimony before the Commission you stated there were contracts made for such work, didn't you?

A. Yes, sir.

Q. And that these contracts were still in existence and in your custody?

A. No, sir; I never said they were in my custody. I might have said they were in existence; of course I don't recollect what I said, but I don't think I said they were in my custody. I might have said I had access to them.

Q. Well, who has these contracts?

A. I suppose they are in charge of the secretary of the company.

Q. Have you got blue print copies of the general map that you refer to as showing the location of all the mains in the city?

A. No, sir; the map that I refer to is a series of volumes, insurance volumes; there are twelve large volumes, and you could not possibly have prints of them. They are in book form, you know.

Q. Can you produce those books or maps here for the inspection of the engineers of the city?

A. If I can get a good truck I can.

342 Q. Or can they be inspected at the office where they are now by the engineers of the city?

Mr. MATHEWSON: I don't suppose the witness knows much about that.

Mr. BURR: I thought he would say "if so advised by counsel."

Mr. MATHEWSON: Perhaps he might say that.

Mr. BURR: I ask counsel to say whether the engineers of the city may have an opportunity to inspect those maps?

Mr. MATHEWSON: I cannot say. I suppose the city has a complete record of all the gas mains in the ground.

Q. Well, in your opinion then from this thorough knowledge you have of the mains there has been no depreciation in the physical condition of the mains?

A. Absolutely none.

Q. And practically the life of a gas main properly laid is eternal?

A. I won't say eternal, but it is so indefinite that I could not say how long it would be.

Q. So there would be no justification for setting aside a fund for depreciation of gas mains?

A. For physical depreciation, no.

Q. And have you got the record—I think you were asked this question by Senator Page, but I will venture to ask it again—have you got the record showing the amount paid out for repairs and replacements since 1884?

A. No, sir, I have not.

Q. You have testified here and elsewhere as to the value of these mains; will you tell us by what rule or by what formula you arrive at the valuation given?

A. I made careful, close calculation as to cost of reproducing the mains under present conditions.

Q. Well, will you let us have the process by which you arrived at that conclusion?

A. Am I to answer that?

343 Mr. MATHEWSON: He asked you the method you pursued, I suppose, in reaching that conclusion. I do not see any objection to your stating it if you have not already stated it.

The WITNESS: I took the cost of the pipes to start with first.

Q. Of what pipe?

A. Of the pipe to be laid, for each size; for instance, if it was a 6 inch main I was computing, I would take the cost of 6 inch pipe per foot. The cost of the lead that was necessary for each joint and divide that up into the feet; and the yarn and cartage of the pipes

to the works; the digging of the trench and filling of the trench, repaving of the street; and I then——

Q. Before you go any further, what did you find the repaving of the street to be?

A. I figured the repaving of the street for old pavement or old style belgian blocks, that we repaved ourselves, at fifteen cents a square yard; and the asphalt block, what we call new pavements, at $3.25 a square yard.

Q. And the digging of the trench?

A. And the digging of the trench, it costs so much a foot, what we have paid for a number of years and I have kept the details for a number of years showing the actual digging cost per foot, and I have averaged that figure.

Q. Where did you keep those figures?

A. In my own handbook, memorandum book.

Q. Where is that memorandum book?

A. Am I to produce it?

Mr. MATHEWSON: You were not asked to produce it, you were asked where it was.

The WITNESS: I have it here.

Q. Will you let me see it?

A. Well——

344 Mr. MATHEWSON: Will you consent to its being offered in evidence?

Mr. BURR: After I have seen it I may.

Mr. MATHEWSON: No, not "may," but if it is produced to you it can be offered in evidence. I think you had better ask him any questions you want.

Q. Is this book you refer to a book of original entries or a book containing entries supplied to you from the financial department of the company?

A. No, sir, they are entries supplied to me from my own department only.

Q. And these are figures which you supplied in turn to the financial department of the company?

A. Yes, sir. They form part of the basis of the cost of the mains.

Q. The book you have contains no other information save as it concerns gas mains in the streets of the City of New York, does it?

A. There is a lot of information in it.

Q. On the subject of gas and gas mains?

A. It *is* a memorandum book that I have kept year after year on different things that I cannot keep in my head, and I use it for reference.

Q. Will you let me see it? Have you any objection to letting me see it?

Mr. MATHEWSON: I do not think you should call for it. I may ask to see all the books of your witnesses and experts possibly, I don't know. I do not know any reason why he should hand you the book and go over it, really. Any point you wish to ask, I suppose the pertinence of the question will be judged.

Q. How do you arrive at your general statement with regard to

cost and value? Are you basing that upon any particular
345 point in the city or time of laying?

A. No, sir, I take an average. As I say, I took the average of costs that I have kept for a number of years, and struck what I thought was a fair average. I did not take a high figure or a low figure; I took the average figure.

Q. Then the data being known only to yourself, no one else could arrive at a definite or logical conclusion with regard to what the actual value or cost was?

A. No, sir, I gave it to the counsel in detail, the whole thing, how it was figured out.

Mr. BURR: Have you got that, Mr. Mathewson?

Mr. MATHEWSON: No, I don't think he means that he gave me anything in writing. Perhaps he is referring to oral conversation; and those I did not commit to writing myself that I knew of.

Q. The sole repository of the information upon which you based the positive statement as to cost or value is a little black book in your pocket?

A. I don't know. I really could not say that.

Mr. MATHEWSON: Mr. Burr, with the number of feet given and the size given, and with the knowledge of the conditions in New York such as your engineers have, it is perfectly feasible evidently, for them to estimate just as well, perhaps, as this witness to some degree what the cost of laying the mains was, as evidenced by the affidavit of your Mr. Marx, that he believed the estimate was moderate and correct, and that he had been over it and checked it up. It is not necessary that this witness's 2 and 2 should be presented to you so that your expert may decide whether he has reached a proper conclusion. I do not think it is called for, really.

Mr. BURR: This witness makes a positive statement as to
346 the cost or value of a very important item in the manufacture of gas, the mains, and the laying and the maintenance of those mains.

Mr. MATHEWSON: And then you suggest that nobody can compute it unless they have just what he has, whereas your witnesses have already computed, and put it in evidence from less data than has already been presented on this record.

Mr. BURR: They replied to the affidavit given to Mr. Justice Lacombe. The witness here now gives data which I have a perfect right to cross-examine with regard to.

The MASTER: I have not heard as yet that you have found out what the allowance was that he made for opening the trench.

Mr. BURR: No.

Q. What was the allowance that you made for opening the trench?

A. For what size of pipe, Mr. Burr?

Q. Well, for, say, one and a half inch pipe.

A. 1½-inch pipe, the width of the trench necessary to lay a 1½-inch pipe is 2 feet 6 inches; the repaving of that trench per foot with asphalt, $3.25——

The MASTER: He is only asking you—you testified about the repaving before. He was only asking you about the opening of the trench.

Q. The expense of opening and digging the trench, that was one of the elements you said went to make up the sum total of the cost and value?

A. The digging of the trench and the cartage and refilling, 15 cents per foot.

Q. Those three items together, cartage, refilling and dig-
347 ging the trench, 15 cents per foot?

A. Yes, 15 cents per foot.

Q. And what other items go to make up the cost?

A. The cost of rock, which of course can be only estimated; I figured that of the sub-soil which has been handled in the city, ten per cent. is rock, and I added to ten per cent. of our total mileage, $1.75 per foot for rock excavation. That is a very conservative estimate.

Q. Where do you get the statement that ten per cent. is rock?

A. From my own personal knowledge. There has not been a street in New York that I have not seen dug up in the last twenty-four years, and I can judge pretty well.

Q. The operations from which you have deducted this average price extended over what period of years?

A. Twenty-three years—twenty-four.

Q. Has the price of labor varied in that time?

A. It has.

Q. Have you taken into consideration that variation in the price of labor?

A. I have at this time, and the variation at the time I made the computation.

Q. What was the cost of labor in digging trenches twenty-three years ago?

A. I could not say. The price of labor twenty-three years ago was $1.50 a day and the price of labor at the present time is $1.75.

Q. Has it only advanced 25 cents a day in that time?

A. That is all, for labor, unskilled labor. Skilled labor has advanced more than that.

Mr. MATHEWSON: That class of labor.

The WITNESS: That class of labor, the man that actually digs the trench.

Q. The cost of material has varied during that extended period, has it not?

A. It has. It has gone up a great deal.

348 Q. What was the cost of 1½-inch pipe twenty-three years ago?

A. 1½-inch pipe, it is such an unusual size—if you would go to six or eight inches, that I am more familiar with, I would rather have it. I have not laid any inch and a half pipe; it was laid before my time. An inch and a half pipe would weigh about five pounds, maybe 3½ pounds to the foot, possibly 4 pounds to the foot. Pipe

has gone up about $3 a ton. Of course it would not make much difference in inch and a half pipes.

Q. How long has electricity been used as a means of transportation in the City of New York?

A. Electricity, well, since the doing away of the cable railroads, and starting of the Metropolitan Underground Traction system.

Q. How long ago was that?

A. I really cannot remember exactly when it was. It was about I should say 8 or 9 years ago, maybe 6 or 7.

Q. And in all that time the only instances of any direct or remote effect of electrolysis that you have observed was at Church Street and at the Brooklyn Bridge?

A. Yes, sir.

Q. So that would not seem to be a proper basis for putting aside a fund for the depreciation of gas mains for the injury through electrolysis, would it?

A. If those favorable conditions were going to continue, it would not be, but if the conditions are going to change as it seems to me they are changing now, it would be.

Q. But if you judge by the past, there is no danger of its changing?

A. How far back have you got to go if you go back to the time of the starting of the Metropolitan road? But the Manhattan Elevated road has only been in operation for the last three years electrically, and the subway in operation only for the last year and a half, and there are a great many roads yet to go into operation, and
349 we cannot tell what system they will use, and how much current they are going to allow to escape.

Q. The condition at the two points, the Brooklyn Bridge and Church Street, will you swear was not found prior to the installation of electricity in any of the ways you have spoken of, by transportation underground or on the surface of the streets, or elevated railroads?

A. I don't understand your question. What am I to swear to?

Q. The pitted condition that you spoke of this morning, I understood you to say that you observed——

A. I cannot swear to that, but I can swear to this, there was no current leaving our pipes previous to the starting of electrical roads, and I can swear to it that the current is leaving our pipes now after starting the electrical roads.

Q. But you saw pitting in pipes or mains before ten years ago?

A. Not that kind of pitting, no, sir.

Q. Is it a special kind of pitting?

A. Yes, sir.

Q. What are the characteristics that distinguish it from the pitting observed prior to the introduction of electricity?

A. Well, you mean to distinguish between rusting or pitting from other causes, is that what you mean?

Q. Yes.

A. If a pipe is pitted from other causes than electrolysis it will be pitted over its entire length, that is, it will not be pitted in parts

and the pipe perfectly solid in other places, whereas in this it is pitted here and there.

Q. How can you say that is due to electrolysis?

A. I do not say it is.

Q. There may be other causes contributing to that effect?

A. The report I got in this case at Church and Spring Street——

Q. Never mind about the report. You did get a report?

A. Yes, sir.

Q. I am only speaking now with regard to what you did yourself, and observed yourself, at these two particular points you tes-

350 tified with regard to.

A. We observed that there was an electric current leaving our pipe and returning to the power house, and where the current was leaving our pipe and returning to the power house the pipe was pitted, and where it was not leaving our pipes and was not returning to the power house the pipe was not pitted.

Q. In those two instances?

A. In that instance at Church and Spring Streets.

Q. You have a record showing the cost of laying, maintaining and repairing the pipes, by size and location in the different portions of the city?

A. No, sir, I have no such record. The only record I have, I have a record, of course, sent to me in my department, a weekly report of the moneys expended on different kinds of repairs and of the different branches, and the pay rolls are initialed by me after they go through, but I do not keep a record.

Q. That memorandum which you have here now in your possession, was that taken from other entries or books?

A. Taken from the pay rolls.

Q. Taken from the pay rolls?

A. Yes, sir.

Q. And are those pay rolls still in existence?

A. I presume they are.

Q. And all the information which you have and which you have given us with regard to the cost of laying and maintaining these mains is derived from an examination by you of the figures given in the pay rolls and which you have summarized in this book now in your possession?

A. No, sir, not as to new mains. You asked me before whether I kept account of all replacements, expenses and repairs, didn't you? And I said I did not. A new main is laid and a report is sent to me as to the cost of that as far as my department is concerned, and I keep that in my department, but what the other expenses are I know nothing at all about.

351 Q. Are you familiar with the mains of any other city in the United States outside of New York?

A. Familiar? No, I am not.

Q. Do you know, Mr. Simpson, that the ground around the Brooklyn Bridge has been very much disturbed, that it has been dug up and replaced time and time again?

A. No, sir, the only place that has been dug up for the last number of years is in front of the bridge at the subway.

Q. Do you know whether that is a natural soil or a made soil?

A. I should say it was filled soil, filled ground.

Q. Has that any effect upon the wear and tear of mains?

A. On cast iron mains, no, unless the case is very extreme.

Q. And on other kinds of mains?

A. It might on wrought iron pipes, yes.

Q. What would be the difference in effect on a wrought iron main of made soil and natural soil, or filled soil or natural soil?

A. A wrought iron pipe that is laid in poor soil and not coated, its life will be quite short.

Q. What should it be coated with?

A. Opinions differ very much as to that over the country. Some people think one thing and some another.

Q. Well, what do you favor?

A. We use asphaltum paint.

Q. What else is used by others?

A. Some use red lead, some use plain black paint, some use coal tar—there are any amount of different kinds of asphalt paint too, and B. & B. paint and paint of all sorts.

Q. Is asphalt paint more expensive than the other coating?

A. It is as expensive as any of them; I use it because I think it is the best.

Q. I want to get this clear. There are on Third Avenue, taking that as an illustration, five or six different service mains in that avenue?

A. Yes, sir.

352 Q. And to make repairs or to lay down new pipes, it is necessary to make five or six openings in the avenue?

A. Why should it be. Do you mean if I wanted—for each one of those five you have to make an opening for each one?

Q. Yes.

A. Of course I would.

Q. So that would be, as a matter of fact, you can readily see, five times as expensive as one opening would be.

A. Oh, no, because your one opening would be a great deal larger than each opening would make on each main.

Q. What I am trying to get clear in my mind is this, that if there was but one large main there, it would need but one opening to repair or replace it?

A. Yes, one very large opening, and that large opening would probably be nearly equal in size to five small ones.

Q. There being five or six mains, it needs five or six openings?

A. If they were all leaking at once, which is not very likely.

Q. If they were all leaking one after the other, or all needed to be replaced or repaired one after the other?

A. It would need an opening according to the size of the main.

Q. Now, when you are called upon to repair pipes of the Standard or the New Amsterdam or the Mutual, is that charged up against the Consolidated?

A. No, sir.

Q. You keep a separate book of account for those expenses?
A. We keep absolute account of all the expenses encountered for those companies.
Q. You keep separate accounts for those three companies, do you?
A. Yes, sir.
Q. Where are those accounts kept?
A. In the accounting department.
Q. Of the Consolidated?
A. Yes, sir. I may say that this was done at the request of the city.
353 Q. What is the width of ditch used for a 16 inch main?
A. Three feet six to four feet.
Q. What is the width of ditch used for a 1½ inch main?
A. Two feet six. You could put a 1½ inch main in a trench six inches wide, but you could not work in it; the reason we have to make it 2 feet 6 is to work in it.
Q. So you only make the ditch twice as wide for a 16 inch main as you do for a main 1½ inches wide?
A. Naturally, sir. If it was not required to work in it we would only make the trench 6 inches wide; since you have to have a man work in it it has got to start with 2 feet 6 inches.
Q. Now, if there was a main on Third Avenue from Grand Street to 129th Street of equal capacity with all the gas mains now in that avenue, how much of a saving could be effected in the maintenance?
A. Taking into account the cost of the new main?
Q. No, without that.
A. Without the cost of the new main? Do you mean if somebody gave us a new main?

By Mr. PAGE:

Q. If it were there, what would be the difference in the cost of maintenance?
A. If it was there without expense to anybody?
Mr. MATHEWSON: If you woke up and found it there some morning.
The WITNESS: Am I to answer that question?
Mr. MATHEWSON: Let us hear what the question is.
Q. (Question read by stenographer as follows:) "Now if there was a main on Third Avenue from Grand Street to 129th Street
354 of equal capacity with all the gas mains now in that avenue, how much of a saving could be effected in the maintenance?"
Mr. BURR: We will assume that that one main is there. Don't you bother about who pays for it.
Mr. MATHEWSON: If you can, answer it.
A. Is that main to be a perfect main, tight and everything else?

By Mr. BURR:

Q. Yes, sir. Just as tight as the main there now.
A. There would be no difference in the maintenance at all.
Q. You have testified you have five or six mains there now?
A. Yes, sir, but those mains have all been put in the same con-

dition that this main that you are talking about would be in and they are of no expense to us at the present time, practically none.

Q. Then these are now new mains, practically?

A. That is exactly what they are, practically new mains.

Q. What would be the effect of say over on Eighth Avenue, does that condition prevail on Eighth Avenue, new mains?

A. Yes, sir.

Q. Does that condition prevail on all the other avenues, First and Second Avenues?

A. Yes, sir. I may state that a cast-iron main consists of two things only, that is the cast-iron pipe and the lead used in caulking the joint. The cast-iron pipe does not deteriorate, and if you take that joint and make it perfect, recaulk the joints, the main is just the same as the day it is laid.

Q. In the affidavit made by you and sworn to by you on the 4th day of May, 1906, in this suit, you say there is to-day no de-
355 preciation in the mains of the company; that is true, is it not?

A. No physical deterioration, didn't I say?

Q. The language you used is, there is to-day no depreciation in the mains of the company?

A. Yes, sir.

Mr. BURR: That is all I am prepared to cross-examine Mr. Simpson on at the present moment, in the absence of the maps and the data, for which I believe we make a united request for their production on Mr. Mathewson, counsel for the complainant company.

Mr. MATHEWSON: Do I understand you request that quarter of a ton of maps?

Mr. BURR: We want to be afforded an opportunity to have our engineers inspect the maps.

Mr. MATHEWSON: I thought you wanted them for the cross-examination of this witness. We would like to have you state what you want the maps for, what use is to be made of them.

Mr. BURR: I want to have an opportunity for our experts and engineers to inspect these maps and if I deem it necessary upon the report made by them I am to have an opportunity to further cross-examine this witness.

Mr. GANS: I don't think Mr. Mathewson's attitude on this is quite fair, because it is for his convenience largely and for the convenience for the Court that the requ is made that we be permitted to examine that quarter of ton c: .aps in their office rather than down here. Also, it will save time to have an expert go over those maps in the office of the company rather than that he should go over them piecemeal while the witness is on the stand. Of course the purpose is to check up what the witnesses testified to.

The MASTER: I should prefer that you try to arrange such
356 questions as that between counsel by means of some sort of an agreement outside of the hearing. If that is not possible I will have to take up that question and dispose of it.

Mr. GANS: If I may be permitted to define the situation a little, I will say that Mr. Mathewson has been permitted to examine by

questions that covered the whole field and when I objected to those questions as somewhat too inclusive it was said that it was incumbent upon us on cross-examination to bring out the details. Now if we go to do that of course we have to take the burden that I think he should have assumed originally, and we have to go over those maps to ascertain whether what the witness says with regard to his conclusions from them is justified by the facts or whether he has committed error in any respect; that applies to accounts and everything else.

Mr. MATHEWSON: I don't think——

Mr. PAGE: I think it further appears that when statements differ to the extent of 64 miles as to the amount of their mains, and a difference in value of some seven millions of dollars, that such a further examination might be found necessary.

Mr. MATHEWSON: I don't think so, Senator. That will be so clearly apparent in a moment that I don't think you will repeat that question as to the mains. You virtually suggest that we are claiming credit for property in mains, several thousand feet less than we possess according to the tax report. We could not be presumed to have been guilty of any improper action in claiming less than the property which we owned and the fact is, as I will show, that these small sizes of mains which you have made reference to and
357 which we claim for here are the mains in use, while the tax report includes certain mains not in use which may be called abandoned and for which we claim no credit as assets. Secondly, as to these larger mains, where there is a difference if you examine the original tax report you will find those figures of difference are in red, and it indicates that is a reduction instead of an addition. It does not show on your map, it is black, it is not an addition at all, there is the whole explanation, and it is as simple as A, B, C.

Mr. PAGE: As I understand, the ruling is reserved now.

The MASTER: Well, it is reserved, as I understand Mr. Mathewson.

Mr. MATHEWSON: Yes, I will take it under consideration.

The MASTER: I understand Mr. Mathewson has it under advisement.

Mr. MATHEWSON: If I don't see fit to do it and you wish to press it we will argue the subject before the Master as to whether you are entitled to it.

By Mr. PAGE:

Q. You buy your pipe by the weight, do you?

A. Yes, sir.

Q. You have already given that inch and a half pipe as weighing 3½ pounds per foot. Can you give me the weight of the different sizes of pipe that you have in use, say two inch, three inch, four inch, five inch, six inch, eight inch, ten inch, twelve inch, sixteen inch, eighteen inch, and so forth?

A. The two inch I will have to guess at.

Mr. MATHEWSON: Do not make any guesses.

358 The WITNESS: Then I cannot tell you. We have never bought any two inch pipe.

Q. Well, you have bought three inch?
A. Yes, sir; 13 pounds to the foot.
Q. What is the length of the pipe?
A. Twelve foot.
Q. Are all the mains 12 foot?
A. Yes, sir.
Q. And what particular kind of pipe do you call it?
A. Cast iron pipe.
Q. What is it, flanged pipe?
A. Hub and spigot pipe.
Q. And that is so of all this pipe?
A. Yes, sir.
Q. Will you give me the weight of the four inch pipe?
A. Nineteen pounds to the foot.
Q. 5 inch pipe?
A. We do not buy it, it is not in use any more.
Q. 6 inch pipe?
A. 32 pounds.
Q. 8 inch?
A. 44 pounds.
Q. 10 inch?
A. That is a size we use very little to-day, it is an outside size, we have some of it, I can give you the—57 pounds.
Q. 12 inch?
A. 74 pounds.
Q. 16 inch?
A. 114 pounds.
Q. 18 inch?
A. 136 pounds.
Q. 20 inch?
A. 160 pounds.
Q. 24 inch?
A. 215 pounds.
Q. 30 inch?
A. 311 pounds.
Q. 36 inch?
A. 425 pounds.

By Mr. MATHEWSON:

Q. Are those exact weights or approximate?
A. Approximate; it will come very near it.

By Mr. GANS:

Q. Within about how near?
A. Oh, well, it might vary five per cent., possibly seven per cent. in some cases; it depends on the foundry making the pipe a
359 good deal. You understand it takes more than twelve feet of pipe to lay twelve feet of main, don't forget that.

By Mr. PAGE:

Q. Yes, you have to allow for the hub and spigot?

A. You have to allow for the depth of the hub. In nearly 5,000,000 feet it amounts to a great deal.

By Mr. GANS:

Q. How much allowance do you make?
A. Small sizes, 4 inches, large sizes, 6.
Q. Where does the large size begin?
A. 24 inches.

By Mr. PAGE:

Q. Below 24 inches you allow four?
A. 20 we allow four and one-half. Below that 4 inches.
Q. And above that?
A. That varies up to 36, we use 6 inches, and for 30 inch, 5 inches.
Q. And 24?
A. 24, 5 inches; 4½ inches for 20 inch.
Q. Now, I suppose in the actual laying of these pipes, there is more than one pipe in the trench, isn't there? You haven't dug a separate trench for each pipe you lay. You lay two pipes in a trench, don't you?
A. We never do lay two pipes together. These pipes we have in the street now have all been laid at different times.
Q. But you dig a new trench for each pipe entirely?
A. We have got to dig a new trench for each pipe.
Q. Why have you got to?
A. If you lay two pipes simultaneously you could use one trench, but none of these pipes were laid simultaneously, but were laid by different companies at different times.
Q. Well, you have laid some new pipes, haven't you?
A. Never have I laid two pipes in one trench, or two pipes
360 in one street at once, always have been single pipes.
Q. Haven't you laid pipes yourself, new pipe in a street already occupied by a pipe?
A. Oh, yes, many a time.
Q. And in that case you dig an entirely new trench?
A. You have to.
Q. Why do you have to?
A. What else could you do?
Q. You could enlarge the trench already there, couldn't you?
A. But when the pipe is in the street, they do not leave the trench open, when they get through laying the pipe, it is filled in; when I get there, I have got to open the street, haven't I?
Q. Yes. It might be cheaper to blast out one side of a rock than it would be to blast a trench through both, making an entirely new trench; that is the point I am getting at?
A. Well, we have never had cases of that kind. If a pipe is laid in the street we are always alone, we have to make our own trench, and anyone laying a pipe in a trench, has never to my knowledge been able to take advantage of anybody else's trench.
Q. But there is nothing in physical laws to prevent your laying two pipes close together?
A. No, but contractor laws and city laws. A contractor would not

allow us to lay our pipe in his trench unless we paid him, and the city would not allow us to interfere with them.

Q. You own the trench, don't you?

A. We own the trench we make ourselves, the same as a contractor owns the trench he makes.

Q. After you pay the contractor, you own the trench, don't you?

A. How do you mean, own the trench? Own the ground the pipe is in? I don't think I quite understand what you mean.

Q. I don't see as it is very material anyway, but what I was getting at——

A. Do you mean that sometimes it is pos-ible for two par-
361 ties to go in together and each lay their own pipe in one trench?

Q. No, I do not, but is it possible for one party to lay two pipes in one trench?

A. But I tell you I have never known of a case of two companies requiring two pipes in one street at one and the same time.

Q. But you have got four pipes in Third Avenue, two on each side of the street?

A. Yes, and probably those four pipes took thirty years to lay them. That is a pipe every seven or eight years; that is a long time apart.

Q. But with regard to your supervision of the mains of the Standard, the Mutual and the New Amsterdam Companies, those are the three you specified?

A. Yes, sir.

Q. Part of your engineering force is engaged in that work besides yourself?

A. The entire force, the superintendent, foremen, the men and all of them.

Q. And as to the work that is done, is that done by your men?

A. Yes, sir.

Q. On those parts?

A. Yes, sir.

Q. And that is paid for, as I understand it, by the Consolidated Gas Company?

A. No, sir, it is paid for—we pay the men but the respective company pays us the cost.

Q. That is the cost of the laborer?

A. The cost of everything, the entire cost.

Q. Does part of your salary go into that?

A. Not directly, but indirectly it does.

Q. How indirectly?

A. Because we have the actual cost of all the labor performed, the material used, and we then add a small percentage for clerical expenses and engineering expenses.

Q. Since what day have you had charge of the mains of the other companies?

A. Since 1890, or 1891.

362 Mr. MATHEWSON: No, no no; think a minute.

The WITNESS: No, I mean 1900, or 1901.

Q. And is this record that you refer to, the charge that is made against these companies, kept in your office or in the office of the accounting department?

A. It is kept in the accounting department on memorandum furnished by my department.

By Mr. GANS:

Q. Are those memoranda kept on file? Are they in the form of vouchers?

A. I suppose they are kept on file in the accounting department.

Q. Do you O. K. them; do you supervise the making out of those vouchers?

A. No, I think my assistants do.

Q. Do you personally audit these items of expense?

A. No, we only turn in the actual amount of labor and material furnished.

Q. Have you ever seen the bills that have been presented to the other companies?

A. Yes, sir, I see them; they come to me before they go out and I initial them.

Q. The accounting department does whatever apportionment is needed with regard to the engineering expenses, and clerical expenses?

A. Yes, sir.

By Mr. BURR:

Q. Can you state what increase in the expense of your department is shown since you took the control of the maintenance of the pipes of these other companies, the Standard, the Mutual and the New Amsterdam?

A. I couldn't say.

Q. There has been an increase, however?

A. I think there naturally would be, it is more work of course, and it would cost more to perform it.

Q. And you have the data showing that increased ex-
363 pense?

A. No, I have not, the accounting department has it.

Q. You had it originally?

A. No, I say it is all kept in the accounting department.

Q. From data furnished by you?

A. No, it is kept in the accounting department from the payrolls turned in from my department every week.

Q. Would the payroll kept by you show the increased expense since 1900, when you assumed the control of the maintenance of the pipes of these three companies?

A. Well, you could hardly say that because the payrolls might change in time from many other causes than that, that would not be an indication at all. You take the payroll, my payrolls this winter were 25% lower than they were last winter, a severe winter; or my payroll one month might be much lower than the next month, on account of doing less work.

Q. Where are you able to find the data showing the increased ex-

penses of your department since you undertook the management of pipes or mains of these three companies, the Standard, the New Amsterdam and the Mutual?

A. All the expenses we undergo for these other companies is accounted for, taken care of and turned into the accounting department; that is charged up to these companies.

Q. Where is it, and in what form—special reports upon those mains?

A. Special reports every month or every two weeks in some cases of the amount of money expended, and the days in which it was done, and the amount of labor and material spent for the Standard, Mutual or New Amsterdam Company, as the case may be.

Q. As distinguished from the constituent companies, of the Consolidated?

A. Yes, sir.

Q. And that is turned in to the accounting or financial department of the Consolidated?

A. Yes, sir.

364 Q. Will you produce those vouchers or statements?

A. It would not be right to ask me to produce papers from the accounting department.

Mr. BURR: Will you produce them, Mr. Mathewson?

Mr. MATHEWSON: I don't know whether I will; I will take it under advisement.

Mr. BURR: That is all I want to ask.

Redirect examination by Mr. MATHEWSON:

Q. Has not the business of the Consolidated Gas Company increased since 1900, requiring more attention from its street force, additional mains and services?

A. Yes, sir.

Q. So that the increase in pay roll and in the expenses of your department from 1900 down would not necessarily be attributable to anything that you had done for these other companies operating in New York, would it?

A. No, sir.

Q. Do you consider it an economical arrangement for the Consolidated and these other companies to have the work done on the mains as you have indicated?

A. For all parties?

Q. For all parties concerned.

A. Yes.

Q. And will you say that any of the city authorities have ever suggested that course to you?

Mr. GANS: I object to that as incompetent, irrelevant and immaterial.

Mr. MATHEWSON: The city is one of the defendants here.

Mr. GANS: It does not make any difference what the city authorities have suggested.

Mr. MATHEWSON: We will see whether it has.

Mr. BURR: I also object to it as incompetent, irrelevant and immaterial.

Objection overruled; exception taken by Mr. Gans and Mr. Burr.

365 A. Yes, sir.

Q. State more fully.

A. The first person who spoke to me about it was Thomas F. Gilroy, when he was Commissioner of Public Works. He asked me if some arrangement could not be made to stop the repeated tearing up of the streets. For instance, if the Consolidated Gas Company got notice of a leak in a certain locality, we would go there and find a main of the New Amsterdam Company or the Standard Company or the Mutual Gas Company leaking. We would then fill the hole in and report it to the Mutual or the New Amsterdam, whichever it was, and they would go and tear the street up again and caulk the joint causing the leak, again. I told him I did not know if we could——

Mr. BURR: I object to his conversation.

The MASTER: Never mind about that.

Mr. BURR: I move to strike it out.

The MASTER: Strike it out.

A. (Continuing:) The next person that spoke to me about it was General Roy Stone, who was then general inspector of street openings.

Q. As to the possibility of one company's doing all the street opening?

A. Yes, sir.

Q. Did he say whether it was preferable to deal with a single company?

Mr. BURR: I object to that. We are not to be bound by conversations of that character.

The MASTER: Ask him to state what he said.

A. He asked me if we could not make some arrangement with the other companies to avoid the repetition of making these openings.

Q. And was this arrangement subsequently made?

366 A. Subsequently made to that, yes, sir. Then the next person was Wisner B. Martin—shall I go on?

The MASTER: You have answered the question.

Mr. MATHEWSON: I will ask him if there was any one else.

Q. Was there anyone else of the city authorities who spoke to you on the same subject?

Mr. GANS: I presume this is all subject to our same objection.

The MASTER: Yes. I will allow it.

Exception taken by Mr. Gans and Mr. Burr.

A. Wisner B. Martin, who was engineer of subsurface construction for the city, asked me repeatedly as to whether we could not make some arrangement to avoid the repetition of tearing up the street.

Q. You have been asked in reference to the placing of one pipe in Third Avenue in place of the various gas pipes of the complainant

company there located. Is there space in Third Avenue, without a large readjustment of other pipes and sub-surface structures, to put a large pipe at present?

A. No, sir.

Q. In place of any one of the small pipes?

A. No, sir.

Q. Would it be a matter of large expense to make that substitution?

A. It would be, very large indeed.

Q. Would it be feasible to put it in the middle of the street, under the trolley tracks?

A. No, sir, it would not.

Q. What would be the effect on the length of your service if you had to run services from a single pipe to each side of the street?

A. It would depend upon where that pipe was placed.

367 Q. Suppose it was placed anywhere that you could think of in the street; would it not make very long services, from one side to the other?

A. If you had one pipe only, it certainly would.

Q. What effect would a pipe between this large pipe and the curbs, to which the service would run, have on the possibility of running a service without great expense?

A. It would interfere very materially.

Q. Would it render the installation and maintenance of the services an expensive matter?

A. It would the installation, I do not know whether it would make much difference in the maintenance.

Q. You have stated that you made up certain figures and gave them to Mr. Carter, the secretary of the company, in connection with the Tax Report of 1902?

A. Yes.

Q. Do you remember whether you gave him any figures after that, or whether he merely took those figures and added to them from his own data?

Mr. GANS: I think the latter part of the question is objectionable; the first part is all right.

Mr. MATHEWSON: Strike out the last part, if it is objectionable to you.

A. To the best of my recollection I gave him the values per foot, from which he computed, or I suppose he computed, his total.

Q. In 1902?

A. Yes.

Q. Do you remember whether you gave him any figures after that?

A. I do not remember, no, sir.

Q. Now, Senator Page has read from the testimony before the Gas Commission this reply of yours:

"Q. Will you state what your method was, or upon what basis those figures were produced? A. I took the mileage of the

368 various sizes of mains we had at that time, and computed the total amount, taking the cost of laying each size of pipe under

the most favorable conditions. I did it for taxation purposes, and I thought those were the right kind of conditions to take. I did not figure any rock, city inspection, engineering expenses, clerical expenses, wear and tear of tools and plant superintendence or any matters of that kind. Q. Did you count any special difficulties on account of pipe construction in the street? A. No sir, I did not."

Did you, in your unit figures, include anything but the bare cost of material, and the labor for laying in soft dirt streets?

A. No, sir, I did not.

Q. So that those figures would not include the total cost of the main in the street?

A. No, sir.

Q. Now, in reference to the character of the figures that you gave to Mr. Carter, I ask you whether you later testified at the same hearing before the Gas Commission, two or three pages later, as follows: This is page 1559 of the printed record.

"By Commissioner SHEDDEN:

"Q. Did you give Mr. Carter any figures as to cost of services? A. No, sir. Q. Did you give him any figures as to the cost of mains? A. No, sir. Q. Did Mr. Carter give you, and did you give him information as to the value of the property of the Consolidated Gas Company, the value of the mains in the streets of New York, on the basis of the company's reproduction for the year ending June 30, 1904? A. I gave him some figures, yes, sir. Q. What were those figures? A. Four million and some hundred
369 thousand dollars, but I did not give him any total; that is what I am trying to tell you. I gave Mr. Carter the cost per foot of the different sizes of pipe, and on that he computed the figures. Q. Then the total figures that went in to make up the property of the Consolidated Gas Company in the streets of New York, on the basis of cost of reproduction, were not your figures? A. Yes, they were. Q. The totals were not? A. No, sir," &c.

Did you testify to that?

A. I did.

Q. Is that correct?

A. It is.

Q. Now, referring to the tax report filed with the State Board of Tax Commissioners, for the year ending June 30th, 1905, to which Senator Page has called your attention, to the amount of $5,801,466.10, and $4,398,160.82, are you able to say of your own knowledge at all how Mr. Carter computed those amounts from the data that you gave him?

A. No, sir, I am not, I have not any idea.

Q. And do those figures in any way modify your testimony to-day, as to the cost to-day or the present value of the mains as they exist in the ground under present conditions?

Mr. GANS: I object to that. How can these figures modify his testimony?

Mr. MATHEWSON: Well, observation of the figures, if you please.

A. No.

Q. Since those figures were given to Mr. Carter, have labor and material increased or decreased in cost?

A. Increased.

Q. In reply to Senator Page's question you gave the cost per foot of laying pipe of various sizes under the old pavement, and
370 under the new pavement; beginning with 1½ inches, $1.14 under the new, and 29 cents under the old pavement. That was the cost of laying at what date, as you understood it?

A. October 31, 1905.

Q. Has there been any increase in the cost of labor or material since that time?

A. There has been increase in the cost of material, not of labor.

Q. Would that then represent the cost of laying the various sizes per foot to-day, the current prices?

A. No, sir.

Q. Would the cost be greater or less?

A. It would be greater.

Q. And do those prices include any allowance on account of rock cutting, which you say represents about ten per cent. of the mileage?

A. No, sir.

Q. And do those figures include anything for cost of city inspection, or engineering expense, or supervisory expense, or wear and tear of tools and plant, or special obstructions in the streets, or underground obstructions, clerical expense, or expenses of that character?

A. No, sir.

Q. When you stated your total cost to-day, or the total value to-day of mains in the streets, to be $12,636,150.04, did you include all those items, including the current cost of labor and material?

A. Yes.

Q. Referring to the differences in mileage between the mains from 1½ to 5 inches, as between your statement of mileage, upon which you made your computation as of September 21st, 1905, and the tax report as of November 1st, 1905, to which Senator Page has called your attention, were there not certain abandoned mains of those sizes which you did not include in your computation of values?

A. There were.

Q. And are you able to say, from the mileage which ap-
371 pears in the tax report, whether the tax report did include those abandoned mains?

A. Whether it did include them?

Q. Yes.

A. It did include them, yes, sir.

Q. So that would include the difference between those two statements?

A. Yes, I did not take into account those abandoned mains at all.

Mr. MATHEWSON: I do not care to subpœna or bring down the original tax report, unless you wish; but Mr. Carter informs me that the differences between the larger sizes appearing on the tax report and Mr. Simpson's testimony appear in red ink on the tax report, and that they were to be deducted instead of added.

Mr. PAGE: That is just what I asked the witness.

Mr. MATHEWSON: This witness did not know. Mr. Carter, who has seen the report, does know. Are you willing to accept the testimony of Mr. Carter to that effect, or shall I bring down the original report?

Mr. MATHEWSON: Because it comes out exactly even every time, by the deduction.

Mr. PAGE: I think it speaks for itself, that it must have been deducted.

Q. Referring to the decrease of services from time to time in case several buildings are taken down and a large building, say a hotel or an apartment house, is placed upon that plot, what is the effect upon the number of services you require?

A. I did not catch that.

Q. If several smaller buildings are taken down and a large building is erected on the same plot, is not the effect to reduce the number of services and to increase the size?

A. Yes, reduce the number and increase the size.

Q. When you spoke of there being required no fund for
372 physical depreciation of mains, did you mean to say that no fund should be allowed for the purpose of renewing smaller mains?

A. I understood that to apply to those that had to be replaced on account of physical depreciation.

Q. You make that distinction, between the replacement of smaller mains with larger mains, and physical depreciation?

A. Yes, sir.

Q. And are you able to say that as to the effect of electrolysis, it may or may not be necessary to have a fund to care for that?

Mr. GANS: I object to that as entirely too vague and hypothetical.

The MASTER: The witness has already testified to that.

The MASTER: I do not see that it adds anything. You have the facts, as far as he knows them. We can draw the inference as well as he can.

Mr. MATHEWSON: I merely asked if he thought there should be a fund set aside for that.

The MASTER: Well, that is a matter of inference.

Q. Is there any one and a half inch pipe now being laid by the company?

A. No.

Q. Is there any 2 inch pipe being laid by the company?

A. No.

Q. What are the lowest sizes which are being laid?

A. We lay nothing less than 8 inch on any blocks or any stretch over 600 feet long.

Q. Do you know whether the subway and the elevated road use the ground return system of electricity?

A. I do not know.

Q. Do you know as to the surface trolley systems? If you do not know, just say so?

A. I do not know from real knowledge.

373 Recross-examination by Mr. BURR:

Q. One question in regard to these abandoned mains. To what extent were these mains abandoned, and what number of mains were abandoned?

(At this point the witness asks for a paper which had been handed by one counsel to another.)

Mr. BURR: I ask that that paper be marked for identification; the paper produced by the witness.

Mr. MATHEWSON: The witness presented it to counsel. Counsel laid it on the table and other counsel picked it up—not a very objectionable proceeding—but when they proceed to pass it around to their experts, I submit that I do not know any authority for it.

Mr. GANS: I do not think that is quite fair; before I picked up the paper I asked you if I could see it.

Mr. MATHEWSON: And I said I had no objection, but this is rather another situation.

Mr. BURR: I now ask that it be marked for identification.

The MASTER: The word "it" does not convey anything on the record. You might ask what paper the witness has been using in the course of his examination on the subject of values, and get it in that way.

Q. What is the paper that I now hand you, Mr. Simpson?

Mr. MATHEWSON: You can say that it is a paper to which you have been making reference.

A. It is the paper from which I made calculations as to the value of mains.

Q. And from which you have been testifying to-day?

374 A. Well, I would scarcely say that. I have not been quoting from it.

By Mr. MATHEWSON:

Q. You have been referring to it?

A. Yes, I cannot carry all these things in my head.

By Mr. BURR:

Q. The figures you have been giving here to-day were taken partly from this paper?

A. Partly.

Q. And those figures upon which you based your calculations are on that paper?

A. Some of my calculations.

Mr. BURR: That is sufficiently clear, I think; I ask leave to have it marked for identification.

(Marked for identification City Exhibit 1.)

Q. I was proceeding to ask you one or two questions in regard to those abandoned mains. To what extent were those mains abandoned?

A. They were disconnected from the system and left in the ground.

Q. How many miles of such mains are left in the ground?

A. Oh, possibly seventy miles and more.

Q. Those seventy miles—do those mains still remain in the ground?

A. Yes, they do.

Q. Are they disconnected from the system?

A. Yes.

Q. If you desired, in order to increase the capacity of your supply, you could put new mains where those abandoned mains are, could you not, mains up to date and capable of aiding you in the extension of your service?

A. We might be able to.

Q. Would you not be able to?

A. In some cases we would, but not in all cases.

Q. Would you not, as a matter of fact, in all cases be able to?

A. No, certainly not.

Q. In what cases would you not be?

375 A. The reason some of those mains were abandoned was that they were where we could not get at them; for instance, that they laid subways on top of them, and we could not get at them to repair them, and we were compelled to put new mains in their places.

Q. Where are those abandoned mains located?

A. They are located all over Manhattan Island, from the Battery to 180th Street.

Q. Have you a list of those abandoned mains?

A. Not in detail, no, sir.

Q. What do you mean by "Not in detail?"

A. We have not the location of them in detail; we have a list of the number of feet or miles of mains that we have abandoned, each size; but just what locality they are abandoned in we have not got.

Q. Then you are able to carry out your present maximum supply of thirty million feet daily without seventy miles of mains that have been abandoned?

A. Not seventy miles of mains that are on our books. The seventy miles of mains abandoned are not on our books.

Mr. MATHEWSON: That is, not on your books as assets?

Q. I am not speaking of them as assets for the present. I am speaking of them simply as mains.

A. No, because those mains that have been abandoned were abandoned because there was another main laid in their place; do you see? The main was insufficient for the supply, and it was not worth while to take it out.

Q. So you laid another under it?

A. Under it, or alongside of it, as the case may be.

Q. What kind of mains were those?

A. Mostly 2 and 3-inch mains.

Q. That is an instance of where two gas mains were laid together, one abandoned and one new?

376 A. They were not laid together. The Senator was asking whether two mains were laid at the same time. One 6-inch main might have been laid thirty years ago, and a new one laid in its place afterwards.

Q. Do you wish to be understood as testifying that there is a new main for every abandoned main laid alongside of the abandoned main?

A. Not always laid alongside of it, but in almost every case there is a new main for every main that is abandoned.

Q. Where did you derive your knowledge? Do you carry that in your head or have you a record of that?

A. Well, no, I carry most of it in my head. I get orders to abandon mains and lay mains; I know what is the practice and what is being done.

Q. Does any record show when these new mains were laid in place of the abandoned mains, and when the abandoned mains were abandoned?

A. In some degree.

Q. What do you mean by "in some degree?"

A. The book I have there would very often state "6-inch main laid to replace 3-inch main." But it don't say whether that 3-inch main was taken up or abandoned, that record would not. The maps that you wish to see have marked on them, the mains abandoned, very often.

Q. Were any of those mains abandoned because of their age?

A. No, sir, not one of them.

Q. Can I be furnished with a diagram or map showing where those abandoned mains are, and their location in the street?

A. I do not think you could be furnished with an accurate one, because we have not kept the location of the abandoned mains at all. We have kept an account of the amount of mains abandoned, but not the location of them at all. That is to say, if in one branch there was abandoned 3,000 feet of three-inch, it would be reported to the office, but it would not show where.

377 Q. Then there is no record possessed now by the Consolidated Gas Company, showing where those abandoned mains are?

A. I do not think there is.

Q. Can you now say whether those mains belong to the six constituent companies, or whether they are mains belonging to either the Standard, the New Amsterdam, or the Mutual?

A. No, all mains belong to the Consolidated Gas Company.

Mr. MATHEWSON: There are no six constituent companies owning anything now; the Consolidated owns it all, and has since 1884.

Mr. BURR: I will accept that suggestion.

Mr. MATHEWSON: We do not care where those abandoned mains are. You can have them if you can dig them up, or anybody else.

Mr. BURR: You have made several little suggestions like that; I will ask the witness about it.

Q. Are those abandoned mains the property of the Consolidated

Gas Company or are they the mains of the Standard Gas Company, the New Amsterdam, or the Mutual?

A. The Consolidated Gas Company only.

Q. And yet you are not clear that the Consolidated Gas Company has any record of where those abandoned mains are located?

A. I did not say *no* record; I said probably it would be hard to get a perfect record.

Q. I am asking you if the company has any record?

A. I have a record, yes, I think it could be dug out.

Q. A record you think it could be dug out from?

A. Yes, it would have to be dug out, because we have been abandoning mains for 17 years; and they have been reported in different fashion from time to time, from three different branches; some years we abandon a good deal, and some years less.

378 Q. When you come here again, will you bring with you a statement in regard to the location of the abandoned mains belonging to the Consolidated Gas Company, and their location?

A. I will, if counsel directs me to; it would be a hard job to get it out.

Q. Well, you can do it if counsel directs you?

Mr. MATHEWSON: No, I do not think it could be done by the next session. It would be a long, arduous and useless proceeding to pick out all of these abandoned mains, scattered all through the streets of New York. It is not property for which we claim any credit, and it is not part of the capital upon which we are asking a return. It would be a long and arduous proceeding, and it is not pertinent at all.

Mr. BURR: It is pertinent to the correctness and fullness of your account.

Q. Can you remember now where any one of those abandoned mains is located, and the size of it?

A. Not offhand, I could not.

Q. But you have a record of the new pipes that you have laid down instead of the abandoned ones, have you not?

A. Certainly we have.

Q. So that by that record you would be able to show the location of the abandoned pipes?

A. No, when I lay a new pipe I do not always state that it was laid because another main was abandoned. I have a record of the new mains laid, of course.

Q. How is it able to be charged up on the books of the company, as to whether it is a new construction or replacement?

A. That is a thing I have nothing to do with, that part of it; that is in the accounting department.

Q. Do I understand you to say that if this new pipe or
379 main is put down alongside of an abandoned main there is no record as to the cost of the putting down of that particular pipe, or no record showing that it is put down alongside of an abandoned main?

A. Whenever a main is abandoned it is reported to me, and I report it to the accounting department, and I note it on my map

and on my books, but I would have to go through the entire set of maps and through the entire set of books to find out when all these 70 miles of mains were abandoned, and I think it would take me at least a month myself to dig it out.

Q. If you put down a six inch main instead of a three inch main, would you not have some record showing that it was alongside of a three inch main that that six inch main was put down?

A. Not of necessity at all, no. Why would we? If I put down a six inch main instead of a three inch main, or cut a three inch main off or take it out, I report it to the accounting department that I have taken it up, or that I have disused so many feet of three inch main, and report that I have laid so many feet of six inch main new.

Q. Instead of three inch main?

A. No; that has nothing to do with it.

Q. So that you have made such records in each case?

A. Always.

Q. When you put down those new mains instead of abandoned mains?

A. Every main that is taken up or disused, and every main that is laid is reported to the accounting department.

Q. Those reports will show the whole operation, will they not, in regard to abandoned mains and new construction?

A. Yes.

Q. And the size of the pipe abandoned, and the size of the new pipes put down?

A. It would, yes.

Q. Will you produce these reports?

A. They are not in my possession; they are in the accounting department. I could not produce them.

380 Q. You made them.

A. No, they were not made by me; they were made by my directions and sent into the accounting department. They go out of my hands and never come back to my hands.

Q. They are made by your direction for the information of the accounting department?

A. Exactly.

Q. And furnished by your department to the accounting department?

A. Yes.

Q. If you are advised by counsel, you can produce those records from the accounting department?

A. I suppose I could go to the accounting department and get them.

Q. And get them?

A. I suppose so.

By Mr. MATHEWSON:

Q. Are those mains which are abandoned of any size which are useful to the company at all?

A. None whatever; they could not be used.

Q. They would be valueless to the company, would they?

A. Absolutely; they could not be put into use by any one.

By the MASTER:

Q. You were asked regarding putting two pipes in one trench. Suppose it was in one of those cross streets like 50th Street, an old main of the Manhattan Company or the Municipal Company, that had been laid in a trench where there was rock that had been blasted out partly; do I understand that if you were now to lay a new main in that street you would start out entirely independent of the old trench and lay a new trench, or would you from your map find out where the old trench was located and put your new pipe in the old trench?

A. Certainly we would put it in the old trench; but the
381 question Senator Page asked was if two mains were to be laid on one street at one time——

Mr. PAGE: Not at all.

Mr. MATHEWSON: That was my understanding. That was what I thought you asked.

The WITNESS: You did not mention anything about rock. Rock makes an entirely different proposition.

Mr. PAGE: I asked you whether you would blast an entirely new trench through rock, or blast out one side of it.

The WITNESS: I did not understand that at all.

Mr. MATHEWSON: I thought that is what you asked.

By Mr. BURR:

Q. That paper which was marked for Identification, City Exhibit 1, from which you testified, was that made up by you, or was it furnished to you by the financial department?

A. It was made up by me.

Q. From you own records?

A. Records as to quantities, number of feet, which were compared with the ac-ounting department before I took them to make my figures on.

By Mr. MATHEWSON:

Q. You have the figures still, you said?

A. Yes, the computations were made by me.

By Mr. BURR:

Q. Can you not make a direct answer? Was that paper made up from the records which you kept in your department, or was
382 it a paper furnished you by the financial department?

A. No, the records were from papers kept in my department and verified by ones in the accounting department.

Q. And those records you still have?

A. I still have.

By Mr. MATHEWSON:

Q. I understand then that if you desire to replace a small main, for instance, with a larger main, you will relay it in the same trench if you can?

A. We certainly would; absolutely; we always do.
Q. And if two mains were to be laid in the street at the same time, you would dig one trench and lay those two mains in, would you?
A. We certainly would.
Q. In other words, you take advantage of an existing trench where you can, where circumstances permit it?
A. Yes, sir.

At 4:40 o'clock P. M. adjourned to Monday, July 23, 1906, at 11 o'clock A. M.

Last Exhibits:
Complainant's 69.
City's 1 for Identification.
State's A.

383 Circuit Court of the United States, Second District of New York

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, MONDAY, *July* 23, 1906—11 o'clock a. m.

Met pursuant to adjournment.
Present: The Master, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

384 Mr. BURR: I want to make a motion with regard to Mr. Simpson's testimony. I move to strike out the testimony of the witness Simpson regarding the cost of construction, maintenance, repairs and value of mains, on the ground that his testimony is based on statements purporting to be taken from the original entries entered in the books kept by the witness and by the company, and now in his and its possession; that such testimony is not the best evidence, and that the complainant is bound to produce such original books and not mere extracts therefrom; the witness, for instance, bases his testimony as to the average cost of repairs and new construction on entries in said books, of such work done for many years past, such entries or books not being produced, plaintiff's counsel remaining mute when called upon to produce the same.
The MASTER: I will deny that motion without prejudice.
Exception taken by Mr. Burr.

ROBERT A. CARTER, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside?
A. 25 Clinton Street, Brooklyn.
Q. Are you an officer of the complainant, the Consolidated Gas Company?
A. Yes.
Q. What office do you hold?
A. Secretary.
Q. Prior to that, did you hold any office with the corporation? What was your position?
A. I had the title of Controller.
Q. During what period have you been in the employ of the
385 company, either as Secretary, Controller or in other capacity?
A. Since November 11, 1884.
Q. Since the organization of the company?
A. Yes.
Q. Were you connected with any one of the six constituent companies before that date?
A. Yes; with the New York Gas Light Company.
Q. In whose charge are the books and accounts of the company?
A. In my charge.
Q. You are familiar with them?
A. Yes.
Q. Are there any mortgages covering the property of the company that you know of?
A. No, sir.
Q. You mean there are none?
A. No mortgages.
Q. What is the outstanding capital stock of the company?

Mr. GANS: I object to that as incompetent, irrelevant and immaterial, and no evidence upon any issue that is presented here.
Mr. BURR: I make the same objection, your Honor, and if the record of that outstanding capital is contained in the books of the company, I call for the production of the original books of entry.
The MASTER: I suppose as to the question of competency there is no doubt better evidence, but I will allow the question.
Exception taken by Mr. Gans and Mr. Burr.

A. Eighty million dollars.
Q. What is the authorized capital, if you know?

Mr. GANS: We make the same objection to all this whole line of proof.
Mr. BURR: The same objection.
The MASTER: Yes; I will allow it.
Exception taken by Mr. Burr and Mr. Gans.
The MASTER: I assume this will be connected later.

A. One hundred million dollars.

386 Mr. MATHEWSON: I will say, if your Honor please, that we thought it was proper to show what the capitalization of the company is, and how much is outstanding, and other details which may show the situation of the corporation. It is alleged in the Bill and also in the affidavits, and I am showing it for what it may be considered worth.

Q. Are you familiar with the agreement of consolidation of 1884, by which this company came into existence, Complainant's Exhibit No. 1?

A. I have seen it, yes.

Q. I observe that the proposed capitalization is stated on that exhibit to be Forty-five millions of dollars, and that the Mutual Gas Light Company is recited as one of the companies to consolidate. Did the Mutual Company become a party to the Consolidated agreement?

Mr. GANS: Does not the agreement speak for itself? I object to it on that ground.

Mr. BURR: The same objection.

The MASTER: Is not that agreement in evidence?

Mr. MATHEWSON: Yes, the agreement is in evidence. I merely ask that as preliminary to another question.

The MASTER: I will allow it.

Exception taken by Mr. Burr and Mr. Gans.

A. No, sir.

Q. Will you state what the amount of capital assigned by this agreement to the other six companies which did come into the consolidation aggregates, if you have computed it or will compute it?

Mr. GANS: Is this just a computation in the place of the agreement itself?

The MASTER: Yes.

387 A. $39,078,000.

Q. Do you know how that figure was reached, at the time of consolidation?

Mr. BURR: Is he speaking of his own knowledge?

Mr. MATHEWSON: He is speaking of his own knowledge, from information that he has.

Mr. GANS: I object to that as incompetent, irrelevant and immaterial. I do not see that it makes any difference how it was reached.

Mr. MATHEWSON: Perhaps not; we will see.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

A. $39,078,000 was the market value in the first place by the appraisal of the property——

Q. No, I have not got to that point yet.

Mr. BURR: I ask that the answer of the witness be stricken out.

Mr. MATHEWSON: Just state how that was obtained, $39,078,000.

A. That represented simply the market value of the stock of the companies which were consolidated—the capital, whether in stocks or bonds or other obligations.

Q. Of the six constituent companies?
A. Of the six constituent companies.

Mr. BURR: I object to that, and ask that that answer be stricken out, there being no evidence as to this witness being competent to testify as to the market values of the stocks of those companies at that time.

Mr. MATHEWSON: That was twenty-one years ago. This witness was an employee of the company, and he said he knew at the
388 time, and I asked him to state. I do not know of any way of proving it except by the statement of some man who has the information.

Mr. BURR: You cannot prove it by the statement of this witness.

Mr. PAGE: It states a conclusion.

Mr. MATHEWSON: That fact was reported to the Senate Committee of 1886, in so many words.

Mr. BURR: Then I submit that all his answer should be is that the Senate Committee has so reported.

Mr. MATHEWSON: That would not be half so good evidence as the testimony of this witness, who was in the company and who knew.

Mr. BURR: This witness cannot testify to values without first being shown to have possessed exact knowledge enough to enable him to testify.

The MASTER: Mr. Burr, at this stage of the case, is it not sufficient to let it go in as indicating that at all events it was on this basis that the market value was arrived at?

Mr. BURR: If he will so testify, yes; but he has asked him a different question.

The MASTER: As to the competency of proof of the market value, you were right, and if our friend does not make any better proof your objection may be good, but I think that these technical objections are all right so far as they go, but in a proceeding of this character they waste time. I will allow Mr. Mathewson to make a *prima facie* presentation of his case along these lines. If he fails in proof, or if his proof is not up to the mark, he takes the risk.

Mr. GANS: I may be wrong about these proceedings; I am not sufficiently familiar with them, but I understand that we
389 have to take our objections now or waive them for good and all.

Mr. MATHEWSON: What is the use of taking objections on points that are perfectly understood and that have always been conceded.

The MASTER: It is quite proper to take an objection, but I think one objection to all this general line of testimony is sufficient.

Mr. PAGE: You do not claim, do you, that that has always been conceded, that 39,078,000—that that represented the market price of the stocks and bonds of the constituent companies?

Mr. MATHEWSON: Yes, I understand that to be so. I understand that the $39,078,000 was fixed as representing the market price at that time of the securities, generally speaking, of the six constituent companies.

Mr. PAGE: I think this is the first time that claim has been made in any proceeding that I have been connected with.

Mr. MATHEWSON: Have you a copy of the Senate Committee Report of 1886?

Mr. PAGE: I said any proceeding that I had been in.

Mr. MATHEWSON: In that proceeding that you have been in—both proceedings, that document was offered in evidence in full, both before the State Commission, and before your Investigating Committee.

Mr. BURR: There was a majority and minority report upon that subject.

Mr. MATHEWSON: Yes, this is the majority report, and it is a matter of fact that that is the way that sum was reached, by taking the market value of the securities of the six constituent companies. Then, what the various items of that were, I propose to show.

390 Objection overruled; exception by Mr. Gans and Mr. Burr.

Q. Under the Act of 1884, pursuant to which the consolidation was made, there is a provision that the capitalization of the consolidated companies shall not be in excess of the aggregate value of the property, franchises and rights of the six constituent companies. Do *not* know whether an appraisal was made at that time of the tangible property of the six constituent companies?

Mr. GANS: We also object to that on the same grounds.

Objection overruled; exception taken by Mr. Gans.

A. There was such an appraisal made, yes, sir.

Q. Has the company those appraisals?

A. Yes, sir.

Q. Do you remember what the aggregate appraisal was in June, 1884, or about that?

The same objection, ruling and exception.

A. $29,994,000.

Mr. PAGE: I think the appraisals will speak for themselves, and will be the best evidence.

The MASTER: Yes.

Mr. PAGE: Are you going to offer the appraisals?

Mr. MATHEWSON: Yes. I offer in evidence the appraisals in question. They are found in the printed record before the Gas Commission, at page 1820 to page 1963, inclusive.

Mr. GANS: We make no objection to their relevancy and materiality, and none as to the form of the proof, subject of course to correction if any errors should develop.

391 Mr. BURR: I have no objection if the witness will testify that those are correct copies of the originals.

Q. I ask you whether the papers I show you are copies of the appraisals?

A. I have not checked those in detail, but my belief is that they are correct.

Q. They were furnished for submission to the Gas Commission, were they not?

A. Yes.

Mr. MATHEWSON: Any objection to these on the ground that they are not correct?

Mr. GANS: Not if they are received subject to correction and comparison.

Mr. MATHEWSON: I will say that they are copies of the report of the Senate Committee of 1886.

The MASTER: They are received subject to verification and correction.

Mr. BURR: With that understanding, I make no objection.

Mr. MATHEWSON: They are subject to verification, of course.

The MASTER: They are admitted. Your objection is overruled, (To Mr. Gans) in so far that they show the fact that an appraisal was made in that manner, but not of course as evidence that the value was necessarily as set forth there.

Received in evidence as Complainant's Exhibit No. 70, but not marked.

Q. Mr. Carter, my computation in reference to these appraisals which are in evidence shows a total of a little over thirty million dollars. Do you remember whether that is correct or not? You did compute it?

A. The original appraisal was slightly in excess of thirty
392 million dollars, but some deductions were made which reduced it to the figure which was finally accepted and used, $29,994,000.

Q. Do you remember the figure at which the franchises of the companies were appraised or fixed?

A. $7,781,000.

Q. What is the total of those two sums?

A. $37,775,000.

Q. The authorized capital of these companies was, as you have stated, $39,078,000 by the consolidation agreement, or a difference of $1,303,000 between the total you have just stated and the total of $39,078,000. Do you know what that was employed for?

A. That was reserved as working capital.

Q. Taking the total of $37,775,000, which represents the appraised value of the tangible property and the franchises together as you have stated, was that amount of stock at once issued, and if so, state how much was issued and the reason why the balance was not?

A. There was issued at the time of the consolidation $35,430,060 of capital stock; the balance of the $37,775,000 representing the value of the tangible and intangible property of the consolidating companies was reserved to retire the outstanding obligations of those companies.

Q. In other words, the $37,775,000 was for the tangible property and the franchises free and clear?

A. Yes, sir.

Q. And as they were subject to certain obligations in the way of outstanding bonds, an equivalent amount of stock was reserved out of that to care for the obligations?

A. That is right.

Q. And when those obligations were cared for, then was the $37,775,000 outstanding, and the property free and clear?
A. Yes, sir.
Q. Now, between the time of this appraisal, which is commonly called of June, 1884, and the actual creation of the complainant company in November, 1884, can you tell what property, if any,
393 was added, to that which had been appraised at $29,994,000?
A. There were additions to the appraisal of June, 1884, of property acquired from that date to November 11th, 1884, amounting to $196,419.01.

Mr. GANS: May it be noted on the record, first, that the witness testifies from a paper that he refers to, and in the second place may there be noted an objection to his testimony as to the money value of property added, on the ground that there has been no basis laid for any such testimony, and the witness is not shown to be qualified to speak as to the value of property. If the testimony is that upon the books of the company there appear items to that effect, it may be taken.
Mr. BURR: I make the same objection.
Mr. MATHEWSON: I understood it to be property acquired, valued by the company at that amount, of course.
The MASTER: It is received with that understanding.

Q. Have you prepared a statement, Mr. Carter, from your knowledge and from the records of the company showing the amount of the appraisal of June, 1884, as sub-divided into classes with the addition of this property which was valued at 196,419.01 showing the total of the 11th of November, 1884?
A. Yes, sir, I have such a statement.
Q. Let me see it.

(Witness produces paper.)
Mr. MATHEWSON: It is similar to the one before the Commission. I will offer in evidence the first three columns. I think that puts it in convenient form so you can see just what the additions were by classes, and then I will follow it down to date.
394 Mr. GANS: I think there should be an understanding, if this goes in in this form, that we are to have the privilege of going to the sources from which it is taken and see those sources and check this up by those sources whenever we so desire, for the purposes of cross-examination or otherwise; because obviously this is not a form in which the complainant is entitled to put in this.
Mr. MATHEWSON: I am not offering it as a statement of value on the part of this witness; I am showing the books of the company.
Mr. GANS: We are entitled to have the books themselves. I am not saying that we want them here now, but I think that should be understood, and ought not to be met by Mr. Mathewson with his sphinx-like attitude when we come to ask for their production.
Mr. BURR: I understand this is being offered as an extract from the original books of the company, and I object to it as not being the best evidence, and if it is received upon any grounds, we certainly should be entitled, as counsel for the State has said, to an examina-

tion of the books for the purpose of examining whether these are correct results which appear upon this extract.

Mr. MATHEWSON: They have been before two Commissions.

Mr. BURR: I was not before the other Commission.

Mr. MATHEWSON: I understand that, but they were accepted, and I understood they were correct. Still, you can compel me to produce the original books to prove that if you want to.

The MASTER: If you want to put that in evidence as the witness' calculation or resumé of certain figures appearing on your
395 books, of course it is quite proper that the books on which it is based should be produced if required.

Mr. MATHEWSON: Yes.

The MASTER: If you can satisfy those gentlemen by allowing someone to go up there and check off those figures, that they are correct, without putting us to the delay and trouble of bringing down truckloads of books here, I suppose it will answer the purpose.

Mr. PAGE: Yes, that would be satisfactory.

The MASTER: But if you offer that in evidence and it is received and they ask me to require you to produce the books of which that statement is a summary, I shall have to rule that they are entitled to it and that you must do it, so that is the situation where the problem is to arrange it in the way that will save the most time and the most trouble for all of us. I assume all they want is to check that up, they do not want to put you technically to the trouble of bringing down a truckload of books.

Mr. PAGE: No.

Mr. GANS: We may not want him to do that, but we want to know if we will have the right to do that if we do want it.

Mr. MATHEWSON: I think that can be arranged.

(First three columns of the statement received in evidence and marked Complainant's Exhibit 71.)

Mr. BURR: With that understanding, as your Honor has brought it to the attention of Mr. Mathewson, we have no objection to the introduction of those three columns.

Q. Will you state when the first increase of stock beyond the original $39,078,000, which you have stated represented the
396 tangible property, franchises, and the working capital, was made?

A. March, 1900.

Q. March, 1900?

A. Yes, sir. Now, pardon me, it was at that time that the increase was authorized, stock being issued subsequently to that date.

Q. Can you produce the resolution of the stockholders, authorizing the increase?

A. Yes, sir.

Q. Have you it here?

A. I have a certificate of increase, a certified copy of the certificate of increase.

Q. Have you a copy of the resolution of the stockholders authorizing the increase?

A. I have a copy of that (producing paper).

Mr. MATHEWSON: I offer this in evidence. Of course that may be checked by the original minute-book if you desire its production. It was in evidence before the Commission and before the Investigating Committee.

Mr. GANS: I simply object to it as immaterial and irrelevant.

Mr. BURR: I object to it as being incompetent, immaterial and irrelevant, and I submit that we are entitled to an examination of the original minute-book, and all the resolutions which preceded the adoption of this resolution and leading up to it.

The MASTER: I will allow it.

Mr. BURR: Exception.

Mr. GANS: Exception.

Received in evidence and marked Complainant's Exhibit 72.

Mr. MATHEWSON: I stated it was subject to verification from the original, and if you desire I will produce the original resolution.

Mr. BURR: What is the date of that resolution?

The WITNESS: March 9th, 1900.

397 Q. This resolution provides for an increase in stock, does it not, from $39,078,000 to $54,595,200?

A. That is the case, yes, sir.

Q. And states that it is to redeem the outstanding four per cent. debentures of the complainant company issued for stock of the New York Gas and Electric Light, Heat and Power Company aggregating $36,000,000?

A. That was the purpose for which the increase was authorized; yes, sir.

Q. Was a certificate filed in the public offices effecting this increase?

A. Yes, sir; of which I have a certified copy taken from our files.

Q. Will you produce it, please?

A. Yes (producing paper).

Mr. MATHEWSON: I offer in evidence certificate of increase of stock of the complainant from $39,078,000 to $54,595,200, dated March 9th, 1900. Is there any objection to our filing a copy of this subject to verification from the original?

Mr. GANS: I object to its relevancy but not to the form of it.

Mr. PAGE: It appearing on the face of the exhibit that the stock was issued for the purchase of stock of the New York Gas and Electric Light, Heat and Power Company, it has no relevancy to this inquiry.

The MASTER: I will allow it.

Mr. GANS: Exception.

Mr. PAGE: Exception.

Mr. BURR: I object to it as being incompetent, irrelevant and immaterial, and having no bearing upon the issues involved in this action.

Objection overruled; exception.

The paper was received and marked Complainant's Exhibit 73.

398 Q. Are you able to state the amount of the four per cent. debentures of the complainant company for which this increased stock was to be issued?

A. $36,000,000.

Q. Was this increase of stock so issued and those debentures retired by them?

A. Yes, sir.

Q. At what rate was that for the stock of the company?

A. $232 a share of $100 par value.

Q. When was the next increase of stock made beyond this total of $54,595,200?

A. Made or authorized?

Q. Authorized or made.

A. Authorized July 16, 1900.

Q. Have you a copy of the resolution of the stockholders authorizing that increase?

A. Yes, sir.

Mr. MATHEWSON: I will also offer this in evidence, Mr. Master, with the understanding that it may be subject to verification by comparison with the original minutes if desired.

Mr. GANS: Same objection as to relevancy and materiality.

Mr. BURR: Same objection on behalf of the State.

Same ruling and exception.

Paper received and marked Complainant's Exhibit 74.

Q. This resolution, provides for an increase from $54,595,200 to what sum?

A. To $80,000,000.

Q. Was any certificate filed in the public offices to effectuate such increase?

A. Yes, sir. Here is the certified copy of it (producing paper).

Mr. BURR: What was the date?

Mr. PAGE: July 16, 1900.

Mr. MATHEWSON: I offer in evidence certified copy of
399 certificate of the complainant company dated July 16, 1900, increasing the stock to the total of $80,000,000 from $54,595,200.

Mr. BURR: I object to it as incompetent, irrelevant and immaterial and not bearing on the issues involved in this action.

Mr. GANS: Same objection.

Mr. PAGE: Same objection.

Objection overruled; exception.

(Paper was received and marked Complainant's Exhibit No. 75.)

Q. Does this $80,000,000 represent the entire outstanding stock of the company?

A. Yes, sir.

Q. When was the increase of the stock from $80,000,000 to $100,000,000 authorized?

A. June 2d, 1904.

Q. Have you a copy of the resolution of the stockholders for that increase?

A. Yes, sir. (Producing paper.)

Mr. MATHEWSON: I offer that in evidence.

Mr. GANS: Same objection as to relevancy and materiality.
Mr. BURR: Some objection on behalf of the city.
Objections overruled; exceptions.
Papers received and marked Complainant's Exhibit 76.
Mr. MATHEWSON: I call the Master's attention to the provisions of this Exhibit No. 76 which are in substance that the Board of Directors of the company be and are authorized to forthwith issue coupon debentures of the company to the extent of $20,000,000, payable July 1st, 1909, unless sooner converted into the stock of the company as hereinafter provided. These debentures were to be dated July 1st, 1904. This certificate was dated June, 1904.
400 And that the $20,000,000 increase was for the purpose of converting those debentures if the holders desired to convert them.

Q. Have you a certified copy of any certificate, if a certificate was filed in the public offices, to effectuate this authorization?
A. I have, yes, sir. (Producing paper.)

Mr. MATHEWSON: I offer in evidence certified copy of certificate dated June 2, 1904, authorizing the increase of the capital stock from $80,000,000 to $100,000,000.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
Objection overruled; exception.
Papers received and marked Complainant's Exhibit No. 77.

Q. I merely ask you whether these three certificates, certified copies of which you have produced, were filed in the offices of the Secretary of State and the County Clerk of New York, respectively?
A. Yes, sir.
Q. At or about the date?
A. At or about the date, yes, sir.

Mr. MATHEWSON: There are two corrections to be made in Mr. Simpson's testimony of the session of July 20th. Page 367, my statement "Strike out the first part" should be "strike out the last part." Also on page 371, "Mr. Simpson's testimony" instead of "Mr. Carter's testimony."

Q. Can you state, Mr. Carter, at what rate the balance of the capital stock above the $54,595,200 was issued by the Consolidated Gas Company, whether it was issued at par or above?

401 Mr. GANS: You mean by that, what they got for it, what the proceeds were to the company?
Mr. MATHEWSON: Yes.
Mr. GANS: Of course, this is subject to our same objection that that would be shown best by the books of the company.
Mr. MATHEWSON: Well, he knows by recollection without reference to the books of the company, I think. I will ask him.
Mr. BURR: I object to it as incompetent, irrelevant and immaterial.
The MASTER: I will allow it.
Exception.

A. From my recollection, all of the stock issued was at a premium of from $150 per share, at which it was sold to shareholders by subscription to $193 and a fraction dollars per share, at which some was sold in the market.

Q. Are you able to recall from your own memory just how much was sold at each rate?

A. I would not like to depend on my memory for the exact figures I could give round figures, but if I may consult a memorandum, I could give the exact figures.

Q. Well, consult your memorandum if that will refresh your recollection.

A. In 1900 we issued to shareholders 136,448 shares at $150 per share.

Q. In cash?

A. For cash. February, 1901, we sold for cash 9,000 shares at 193⅜. From September, 1900, to August, 1902, we issued in exchange for debentures given for New Amsterdam stock, 37,736 shares at $190 per share. In 1903 we issued to shareholders 70,824 shares at $150.

Q. Was that cash?

A. For cash, yes, sir.

By Mr. GANS:

Q. These figures are all taken from the books of the com-
402 pany?

A. Are all taken from the books of the company, yes, sir.

Q. And that summary from which you have been reading, is a summary taken from the books of the company, is it not?

A. Yes, sir.

Mr. MATHEWSON: You do not mean it will be found on the books of the company in the shape of a summary?

Mr. GANS: No, sir, but it is a summarization of what you have found on the books of the company?

The WITNESS: Exactly.

Q. Were you familiar with the transaction at the times they took place?

A. Yes, sir.

Q. Do you know whether the record in the books in reference to them is correct?

A. It is correct, yes, sir.

Q. Does that account for all the stock of the company issued beyond the $53,595,200?

A. Yes, sir.

Q. Do you remember at what figure the premiums on stock now issued appear in the books?

Mr. PAGE: What do you mean by that?

The WITNESS: Something over $14,000,000.

Mr. PAGE: You mean the amount received over and above par value?

Mr. MATHEWSON: No, the premiums at which the various issues

of stock were put on. I ask what the premium appears to be on the books.

The WITNESS: Something over $14,000,000.

Mr. GANS: Won't you explain just what the premium means there; does that mean the excess over par?

Mr. MATHEWSON: The excess over par.

403 Mr. GANS: As credited on the books?

Mr. MATHEWSON: Precisely.

Mr. PAGE: Ask whether this was stock issued for exchange at £190 and whether that is a part of that $14,000,000.

Mr. MATHEWSON: Yes, precisely.

The WITNESS: $14,322,217.95 is the amount of premium carried on the books of the company.

Q. Does that include the entire amount of premium realized on the issue of this stock?

A. No, sir; it does not, because in cases where we exchanged our stock for the debentures issued for the stocks of the New York Gas, Electric Light, Heat and Power Company and the New Amsterdam Gas Company we carried the stock acquired at the par value of the stock that we issued and did not carry it at the premium at which our stock was issued, which was 232 in the case of the New York Gas, Electric Light, Heat and Power Company and 190 in the case of the New Amsterdam Gas Company.

Q. In other words, you reduced your books to the par of that stock you issued and did not carry it into the premium account?

A. Precisely.

Q. Will you state how much additional premium account would have resulted had you carried it at the rate at which it was issued?

A. $23,879,183.06.

Q. So that the total premium received over par for the stock of the company so issued would amount to how much?

A. I will have to make a little computation to get that—$38,201,401.01.

Q. That represents the total premium on the issue of the entire $80,000,000 of stock, does it?

A. Yes, sir.

Q. Are any debentures outstanding issued by the company prior to the issue of July 1, 1904, of which I shall ask you later?

A. Yes, sir, a balance of $1,387,000.

404 Q. Do you remember when they were issued?

A. In 1888.

Q. About that time, at any rate.

A. About 1888.

Q. Have you a copy of the resolution—I think the resolution authorizing the debentures of July 1 is in, isn't it; or have you a separate one for that, Mr. Carter?

A. No, I have not.

Q. Is that a separate resolution?

Mr. PAGE: Yes, "Resolution for issuing debentures to be converted into stock."

Mr. MATHEWSON: That is a recital of it.

Mr. PAGE: I say, that is my recital of it; the resolution is Exhibit 76, and the certificate for increase is Exhibit 77.

Mr. MATHEWSON: The resolution authorizing the increase?

Mr. PAGE: That is Exhibit 76.

Mr. MATHEWSON: Quite right; that resolution covers both.

Q. Exhibit No. 76, Mr. Carter, covers both the debentures and the issue of the $20,000,000 additional stock above $80,000,000 for their redemption, does it?

A. Yes, sir.

Q. Will you tell what proportion of the $20,000,000 debentures which the July 1st, 1904 resolution authorized were actually issued?

A. $19,857,600.

Q. And issued at what rate?

A. At par.

Q. Do you know for what purposes those debentures were issued, or the purpose of issuing them; what particular matters were in mind, if any?

A. In a general way to pay for improvement and betterments, additions to the plant and property of the company, cancelling the company's obligations, purposes of that kind.

Q. Issued for betterments?

A. Betterments, yes, sir.

405 Q. Did it have any relation to the Astoria plant, if you know?

Mr. GANS: I object to that, the purpose for which these debentures were issued and what somebody had in mind when they passed a resolution issuing them.

The WITNESS: I think the purposes for which they were issued is very plainly indicated by the employment of the funds since.

Mr. GANS: That may be.

Mr. BURR: Is not the purpose for which they were issued specified by the resolution?

The WITNESS: Practically, as I have indicated.

Mr. MATHEWSON: In general, yes. I was asking what particular improvements he might have had in mind.

Objected to as immaterial, calling for the mental operation of the witness, or the mental operations of the minds of the Board of Directors.

The MASTER: It will be better to ask what they were used for.

Mr. BURR: I object to what he had in mind, and ask that the witness be confined as to what they were actually used for.

Mr. MATHEWSON: I ask for the purposes.

The WITNESS: The improvement at Astoria, the construction of the gas plant at Astoria was the particular purpose.

By the MASTER:

Q. Have they been used for that?

A. To a very considerable extent, sir. To the present
406 time we have expended several million- of dollars on the Astoria plant.

By Mr. MATHEWSON:

Q. The Exhibit 71 shows the total of property on November 11, 1884, as carried on the books of the company, including franchises of how much?

A. $37,770——

Q. No, no, November 11, 1884.

A. $37,971,419.01.

Q. Have you prepared the tabulation showing the amount at which those particular items were carried on the books of the company on each December 31 down to date?

A. Yes, sir; I have such a memorandum.

Q. Produce it.

A. This is brought down to October 31, 1905 (producing a paper):

Mr. MATHEWSON: I offer this in evidence.

Mr. GANS: Objected to as incompetent, irrelevant and immaterial, and we object to this form of the introduction of it unless it is to be understood, as I said before, that we may have the opportunity of checking it up by the books and disclosing it through the books.

Mr. MATHEWSON: All that I have asked is whether the amount of these items appears on each December 31 in the books of the company at those figures, not whether they are the values or how they are reached.

Mr. BURR: I object to it as not the best evidence.

Mr. GANS: Of course, it is subject to verification from the books of the company necessarily.

The MASTER: I will overrule the objection.

Messrs. Gans and Burr except.

Received in evidence and marked Complainant's Exhibit 78.

407 Q. Have you prepared a table, Mr. Carter, comparing the items of assets which are contained in Exhibit 78, as between November 11, 1884, and October 31, 1905, showing the increases or decreases of items, and, also, by the books of the company, the amount expended for repairs during that period?

A. Yes, sir; I have such a statement (producing a paper).

Mr. BURR: May I inquire here what counsel purposes proving by the introduction of these exhibits? Is it the original cost or present value of the property? If it is the original cost, does it not leave it liable to us to go into the cross-examination of the appraisals made at the time of the consolidation in 1884, which he claimed a few seconds ago we were foreclosed from examining into, they having been passed upon by the Legislature?

This purports to be a record of real estate, plants, property and works, as shown in the balance-sheets of the company from 1884 to 1905, that whole period. I think we are entitled to ask him what is the object of the introduction of these records beyond 1900, unless he is going into the original cost of the plants; and if he is going into the original cost, upon what is he basing his claim as to the price or cost, whether upon originally the cost or upon the present

value as contemplated for reproduction, as it exists to-day, as these plants exist to-day.

Mr. MATHEWSON: You are raising a good many questions in that inquiry, Mr. Burr. I am introducing these now in order to show the progress of the company, if you please, from the time of its incorporation up to date, so that in two or three pages one may have a bird's-eye view of its development. I suppose it will ap-
408 pear how the total now compares with 1884. The amount of renewals and repairs which appears in the statements in bringing up this total is some indication perhaps as to the condition in which the plant has been kept; and as to valuations we do claim that the value of the property to-day, the cost to reproduce it, is the value of the property devoted to the public service, including our intangible property, franchises and good-will, as well as tangible property, and that that is the basis upon which we are entitled to earn a return.

Mr. BURR: I object to it as incompetent, immaterial and irrelevant.

Mr. GANS: I make the same objection to the last exhibit as I did to the one before the last.

The MASTER: I will receive it.

Messrs. Gans and Burr except.

Received in evidence and marked Complainant's Exhibit 79.

Q. Have you prepared a balance sheet, a condensed balance sheet, of the company showing the assets and the liabilities on October 31st, 1905?

A. Yes, sir (producing a paper).

Q. I referred to another one.

A. What do you refer to?

Mr. PAGE: A balance sheet compared with November 11, 1884.

The WITNESS: Oh, no, I don't think I have that.

Mr. MATHEWSON: I think perhaps what you have in your hand will answer the purposes.

Q. This was the one similar to that which was called for by the Gas Commission, isn't it, and which was submitted?

409 A. Yes, sir, that was submitted to the Gas Commission (Exhibit 177 before the Gas Commission).

Q. Have you prepared a statement of assets and liabilities of the Consolidated Gas Company from its books as of October 31, 1905, showing the total book values of its assets and the sources from which derived?

A. Yes, sir (producing statement).

The paper is offered in evidence.

Mr. GANS: Same objection.

Mr. BURR: Same objection, and objected to on the ground that the books are the best evidence.

Same ruling; exceptions.

Received in evidence and marked Complainant's Exhibit 80.

Mr. GANS: By my objection I meant it was to be, if received at all,

subject to our rights to verify it by the books and to examine the books.

The MASTER: Yes.

Mr. MATHEWSON: I don't know what you mean to examine, but I suppose to verify by the books would cover that; I don't think it includes the right to examine the books *ad libitum* on subjects not introduced.

Mr. PAGE: A balance sheet pretty nearly brings in the books, does it not?

Mr. MATHEWSON: At that time, yes.

Q. Does the $47,664,984.91 which appears in Exhibit No. 80 opposite the title "Plants and Property, Manhattan," include the franchises of $7,781,000?

A. Yes, sir.

Q. Deduc-ing franchises would leave a total for that item of how much—in order to get at the tangible property only there included?

A. $39,883,984.91.

410 Q. Now, Mr. Carter, for our convenience, have you prepared a tabulation showing the items making up such amount of $39,883,984.91 by general classes, and the other items shown on Exhibit 80 which the company claims at that time to be invested in its gas business?

A. I have a statement of that kind (produces statement).

Q. This statement which you have just handed to me contains in other respects the same items as Exhibit No. 81, does it not?

A. Yes.

Mr. MATHEWSON: I offer this in evidence.

Mr. GANS: We make the same objection.

Mr. BURR: The same objection.

The same ruling and exception.

Received in evidence and marked Complainant's Exhibit 81.

Q. Will you add to the items shown on Exhibit 81, the total of $61,823,949.63, the item of franchises, $7,781,000, at which it appears on the books, and see what the total is?

A. $69,608,949.63.

Q. That is the same total as appears on Exhibit 80?

A. Yes, sir.

Q. I will pass the item of real estate, $10,929,785.59, and plant, $16,087,428.72, and call your attention to the item of mains, $7,852,153.03. Did you hear the testimony of Mr. Simpson the other day on the subject of mains?

A. No, sir, I did not.

Q. He stated in substance that a certain mileage of mains of 5-inch size or lower was included in his total of 822 miles of mains, respecting which he gave value, but it appeared by the tax statement of November 1, 1905, that there was a greater mileage of mains of those sizes, or of some of those sizes, specified in the tax report. Can you explain that?

A. The figures that appear in the tax report were put there
411 in error or through a clerical inadvertence. We only should have reported, according to my understanding the mains that were in use.

Q. And carried on the books of the company?

A. Carried on the books of the company as in use, but through a clerical inadvertence the abandoned mains were included in that report.

Q. So that the statement of Mr. Simpson as to the mileage of mains of the company which it carries on its books as an asset, and for which it claims right to earn, was correctly stated, was it?

A. Yes, sir.

Q. It appeared too that compared with June 30th, 1905, the mileage given by Mr. Simpson in respect to one or two sizes of the larger mains was slightly less, as stated by him, for October 31st, 1905, and the difference between the mileage of mains in 1905, June 30th, and 1905, October 31st, in those cases, was stated in the Tax Report. Do you know whether that difference was stated in red ink or otherwise, and indicated whether it was an addition or a subtraction from the June 30th status?

A. My understanding was that it was indicated in red in the report to the State Commission, and should have been so indicated, as there were a certain number of feet of mains of the larger size taken up during that period from June 30th to October 31st, 1905.

Q. Then, is it your understanding that Mr. Simpson's statement of the mileage of mains is a true statement of the mileage of mains of the company?

A. Yes, it is a true statement.

Q. Carried on its books as an asset?

A. Yes.

Q. Passing the item of services on Exhibit 81, I find the item Meters, Meter-Cocks, and connections and miscellaneous property, $3,802,554.50. Are you familiar with the character of property included there?

A. Yes.

Q. Will you state what it is in further detail than it is here, if you are able to?

412 A. It includes scows owned by the company, pipes, and specials; meters and meter-cocks and connections; horses, wagons and harness; furniture and fixtures; gas stoves and property of that character. Tools and implements you might include also, as that is a rather important item.

Q. Have you had any supervision in reference to purchase of articles of this class for the past few years?

A. Yes.

Q. Under whose supervision is this purchasing department?

A. Under whose immediate supervision?

Q. Yes.

A. We have a purchasing agent who attends to the details and has charge of the clerical force.

Q. And under whose supervision is he?

A. Under my supervision.

Q. And when purchases are made or are to be made, by whom are they checked? Are they checked by you?

A. Not personally, no, sir.

Q. By whom?

A. Checked as to what?

Q. As to the prices paid?

A. As to prices paid, the correctness of the prices at which we are billed for supplies is checked by the purchasing agent. Extensions would be checked in the accounting department, extensions and footings of the bills.

Q. Do you go over the bills of purchases?

A. More or less.

Q. Are you familiar with the prices which are paid by your company for these various items included in this $3,802,544.50?

A. Quite familiar.

Q. How long have you been familiar with such items of cost?

A. Several years.

Q. Are you able to state what the value, based upon cost of reproduction to-day, would be of that property which is carried on your books at $3,802,544.50?

413 Mr. PAGE: I object to that as entirely incompetent.

Mr. BURR: The same objection.

Mr. GANS: The witness is plainly not qualified to testify to that.

Mr. MATHEWSON: He says he is familiar with the prices.

The MASTER: He is not asked to state it yet, is he?

Mr. PAGE: Yes, I think so.

The MASTER: He is asked whether he is able to state?

Mr. MATHEWSON: Yes, that is what I asked him.

Mr. GANS: That is his own conclusion. The Master is the best judge of that.

The MASTER: We will see what he thinks about it.

Exception taken by Mr. Gans and Mr. Burr.

A. I am able to state roughly what it would cost to reproduce that property which appears in this exhibit as of the value of $3,802,544.50.

Q. Will you state?

Mr. PAGE: That is objected to.

The MASTER: Mr. Mathewson, I do not think that evidence would be of the greatest value.

Mr. MATHEWSON: Very well. If the Master does not think it would be of the greatest value, I would not wish to introduce any evidence of that superlative character.

The MASTER: Here is a gentleman, secretary of the company, who has had a great mass of these details coming before him, and he says he is familiar in a general way—more or less familiar with it—I will allow him to answer it. It goes on the record in
414 either event, whether it is excluded or not. It goes on the record for what it is worth. I think there is force in the ob-

jection of the other side that he has not been proven qualified, but I will allow it.

Exception taken by Mr. Gans and Mr. Burr.

Mr. MATHEWSON: State, Mr. Carter.

A. The cost of reproducing the property comprised in that value given in this Exhibit 81, of $3,802,544.50, is approximately $4,100,000.

Q. Will you state how many meters there are in that item?

A. 441,223 meters, including ordinary meters and prepayment meters.

Q. Meter cocks and connections, how many?

A. I should say about 387,000 meter cocks and connections.

Q. Have you stated all the classes of property which are included in this $3,802,544.50 in your previous answer? If not, give a complete classification by headings, meters, meter cocks, connections, scows, etc.?

A. I think I have included everything already, except possibly the automobiles.

Q. Did you include gas stoves?

A. I included gas stoves.

Q. Do you know whether this property is purchased by contract, general contract, or is any of it so purchased?

A. Some of it is. The cast iron pipe which is included in the pipe and specials is purchased under a contract.

Q. How about your gas stoves?

A. The gas stoves—some are purchased under contract, or rather are made for the company.

Q. Under a contract?

A. Under a contract.

Q. In such cases are the contracts in your possession?

A. Yes.

Q. Do you not know the prices fixed?

A. Yes.

415 Q. In making this estimate to which you have testified, as to the cost of reproduction, have you gone over, carefully the purchases, the rates and schedules of prices charged by different concerns, and all other data which was available, which would make it possible for you to make a careful estimate?

A. That is largely done under my supervision.

Q. I mean under your supervision, even if not by your hand?

A. Yes, sir.

Q. And for the purpose of qualifying you to give an estimate?

A. Yes.

Q. Take the next item in Exhibit 81, Materials and Supplies, $616,470.08. Of what character is that?

A. It comprises what is strictly gas making material, and material employed in the distribution of gas.

Q. How much of it is gas making material?

A. $449,268.42.

Q. Consisting of what class of material, generally speaking?

A. Coal, coke, gas oil, iron mass, lime and supplies of that nature.

Q. Does this $616,470.08 represent what that material and supplies cost the company, or some other measure?

A. The cost.

Q. That is not an estimate of the present value?

A. No.

Q. Are you generally familiar with what the company has been paying for supplies *for* that character and with their value?

A. Yes.

Q. Did the actual value on October 31, as far as you are able to judge, differ from the book value? I mean the value or cost of reproduction new? Did it differ from the cost value?

Mr. GANS: I object to that; he is not qualified to testify as an expert on values.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

A. No.

416 Mr. PAGE: Well, he says it does not.

Q. The next item is cash working capital, $1,000,000. Does that represent all the cash at that time in the possession of the company?

A. No, sir.

Q. Can you say how much cash the company had on hand at that time?

A. Altogether?

Q. Yes.

A. $7,200,423.64.

Q. And was that cash in part the product of the debentures of July 1, 1904?

A. Yes.

Q. And how much of the debentures, or the proceeds of the debentures, were then in temporary investments in addition to the cash to which you have referred?

A. Well, the total of cash and temporary investments?

Q. Yes.

A. $12,717,494.64.

Q. So that a little over $7,000,000—about $7,300,000—of the debentures had been, up to October 31, invested, or rather their proceeds had been invested?

A. Yes.

Q. Are you familiar with the requirements of the company with reference to working capital?

A. Yes, sir.

Q. Is a million dollars in cash, in your judgment, fair working capital, according to the requirements of the company.

Mr. GANS: I object to that as a question upon which opinion evidence cannot be given. I do not think the conclusion of the witness can be called for on that proposition.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

A. I should consider a million dollars was a fair conservative amount of working capital, such as a company like ours would require for current purposes.

417 Q. The next item on Exhibit 81, Accounts Receivable, is $2,000,000. That does not represent all the accounts receivable of the company, does it?

A. No, sir.

Q. Do you remember, or can you state, what the accounts receivable were on October 31, 1905?

A. Well, including the item of temporary investments, &c., the amount would be $8,517,071. That includes what is due from gas consumers and from sundry debtors of the company.

By Mr. GANS:

Q. That is included in the Two million dollar item, whatever it is?

A. That is included in the Two million dollar item; they exceed the Two million dollar item as a matter of fact, those two items alone. There was due at that time from gas consumers and what are termed "sundry debtors," $2,336,000 in round figures.

Q. Do your accounts here show how much of that was due from gas consumers?

A. From gas consumers? $1,604,000 of that was from gas consumers.

By Mr. MATHEWSON:

Q. How often do you send in bills, ordinarily, for gas to consumers?

A. Monthly, most of them.

Q. Are they always collected monthly?

A. No, sir; sometimes they are a month or two in arrears from some customers, we would generally I think have something like—approximately a month's bills outstanding due from customers at any point, at any time in the month.

Q. What other accounts receivable are there in addition to these from consumers?

A. We have amounts due us from contractors for whom we do some work in the streets. We have amounts due us from

418 people to whom we sell our residual products. The city owes us money for work done in connection with street lamps; repairing, erecting and removing lamp posts. It is that class of items that make up the most of the amounts due other than for gas.

Q. Are you personally familiar with the character of the accounts of the company outstanding and with their amounts as they run along from time to time?

A. Yes.

Q. Do you consider Two million dollars as a fair amount of accounts which may be outstanding; in your business and in that shape as capital?

Mr. GANS: That is objected to as a question upon which opinion

evidence cannot be given, and as calling for the conclusion of the witness.

Mr. BURR: And we object to it as incompetent, irrelevant and immaterial.

Objection overruled; exception taken by Mr. Gans and Mr. Burr.

A. I think that would be the fair amount, or would be the usual amount, I might say, due to the company from various parties for that kind of service.

Q. Capital that is tied up?

A. Permanently tied up.

Q. Or included in the accounts?

A. Yes.

Q. Continuously tied up?

A. Yes, continuously would be better.

Q. It is always there; can never be paid out, can it?

A. No, sir.

Q. You have to have that margin?

A. Exactly.

Q. The next item is capital invested in gas manufacturing plant at Astoria, etc., $5,560,000. Will you state the securities of the Astoria Light, Heat and Power Company which the Consolidated Gas Company held on October 31, 1905, representing that total?

419 Mr. BURR: Objected to as incompetent, irrelevant and immaterial.

Mr. GANS: The same objection.

The MASTER: The same ruling.

Exception taken by Mr. Burr and Mr. Gans.

A. $500,000 of the capital stock, being the entire amount of the capital stock outstanding of the Astoria Light, Heat and Power Company, and $375,000 of the mortgage bonds of the company, the balance of their obligations to us being represented by notes.

Q. How much would that leave for notes?

A. $4,760,000.

Q. That total would aggregate $75,000 more, then, than the $5,560,000 stated on Exhibit 81. Will you explain that?

A. The bonds are included at 80 per cent., not at par.

Q. In other words, you took the bonds of the Astoria Company, $375,000, at 80 per cent., which meant $300,000 advanced by the complainant company on that account; is that right?

A. That is the case, yes, sir.

Q. Did the company advance to the Astoria Company the cash equal or equivalent to the entire amount of the notes that it held?

A. Yes.

Q. Did it take the capital stock of the Astoria Company, $500,000 at par, in cash?

A. Yes.

Mr. BURR: This is all subject to the same objection.

The MASTER: Yes, the same ruling.

Q. I will ask you in regard to this item, the situation on June 30, 1906, respecting which Mr. Bradley testified; will you state how much the Consolidated Gas Company holds in stock, bonds and notes of the Astoria Company, at that time?

A. $7,010,000.

420 Q. Does that count in the bonds at 80 per cent., that $300,000?

A. Yes, sir.

Q. And the capital stock, still $500,000?

A. Yes, sir.

Q. How much in notes?

A. $6,210,000.

Q. Now, do you know whether those moneys had been actually expended at Astoria?

A. I do know, yes, sir, that they have been expended.

Q. You have charge of the books and records with reference to those expenditures?

A. Yes, sir.

Q. Can you tell the amount unpaid as yet upon uncompleted contracts?

A. I would not like to trust my memory, Mr. Mathewson, and I have not a memorandum of it.

Q. Will you get that amount?

A. I will do so, yes, sir.

Q. You have the contracts in your control?

A. Yes.

Q. And you are able to compute and make a statement?

A. Precisely.

Mr. MATHEWSON: We desire to check Mr. Bradley's testimony on that subject to see whether he was correct.

The WITNESS: I will make it up and bring it to you. You do not want that to-day, do you, to-morrow will do.

Mr. MATHEWSON: Yes, unless you can get it during recess. If you can I wish you would.

The WITNESS: I will try to get it to-day then.

(Here a recess was taken until 2:15 o'clock p. m.)

421 After Recess.

Examination of ROBERT A. CARTER continued by Mr. MATHEWSON:

Q. Mr. Carter, do you know whether the Consolidated Gas Company owns all the bonds and notes of the Astoria Light, Heat & Power Company outstanding, as well as all its stock?

Mr. BURR: Objected to as incompetent, irrelevant and immaterial. Objection overruled; exception.

A. Yes, sir; the Consolidated Gas Company owns all the outstanding securities of the Astoria Light, Heat and Power Company.

Q. And has the Astoria Light, Heat and Power Company received

any funds except those advanced to it by the Consolidated Gas Company through purchase of these securities?

A. None other.

Q. The next item on Exhibit 81 reads: "Invested in cartage plant (through ownership of the entire stock of the National Coal & Coke Company) $50,000." Is the National Coal & Coke Company a New York corporation, if you know?

A. That is my understanding.

Mr. MATHEWSON: I do not think the certificate of incorporation has been offered, has it?

Mr. PAGE: No, I do not think it was.

Mr. MATHEWSON: Nor of the Astoria Company?

Mr. PAGE: No.

Q. Will you make a note to secure those two certificates? What is the capital stock of the National Coal & Coke Company?

A. $50,000.

Q. Then the Consolidated Gas Company owns all the stock, does it?

A. Yes, sir.

422 Q. Are there any mortgages on that property, if you know?

A. None, sir.

Mr. BURR: This testimony with regard to these outside companies is taken subject to my objection.

The MASTER: Yes, that is right.

Mr. MATHEWSON: There are only two, the Astoria Company and this Coal & Coke Company.

Q. Will you state what the National Coal & Coke Company is, what its business is and the occasion for its incorporation?

A. Prior to the organization of that company the carting of coke was done by contractors. The company believed that by doing its own carting or having it done by a company of its own organizing that it could save something from the amount that was being paid the contractors for that service. And experience has confirmed that understanding, that they could economize.

Q. Do you know what was paid for this $50,000 of stock by the Consolidated Company?

A. $50,000.

Mr. GANS: When was that company organized?

Mr. MATHEWSON: The certificate will show, but can you remember?

The WITNESS: I would not like to trust my memory as to the date of it, but I should say in 1900; but I would not be perfectly sure of it.

Q. Does this company do all the carting for the Consolidated Gas Company?

A. No, only the coke carting.

Q. Coke and coal. Does it not act as a selling agent or company to dispose of the residuals of coke?

A. It does; it attends to the sales of the coke and deals with
423 the public and with all buyers of coke.

Q. Does it pay any return in the way of dividends back to the Consolidated Gas Company, do you know?

A. It has paid as high as 25 per cent. in dividends in one year.

Q. And this manner of handling coke has proved a measure of economy, has it not?

A. It has, yes, sir.

Q. Referring further to Exhibit 81, following the total of $49,110,454.99 appears a statement that from the proceeds of the debentures of July 1st, 1904, $6.200,423.64 in cash, and $6,517,071 in temporary investments pending investment in further construction then in progress remained. Those two last amounts aggregating $12,717,494.64 have changed as to amount somewhat since October 31st, say up to June 30th, 1906, I suppose?

A. They have changed, yes, sir.

Q. There has been a further investment at Astoria, as you have stated?

A. Yes, sir.

Q. Are you able to state at the moment just what change there has been in that regard?

A. I can state the amount.

Q. Very good.

A. Remaining of that original $12,717,494.64. On June 30th, 1906, it amounted to $11,794,354.02.

Q. Returning to the item in Exhibit 81, meters, meter cocks and connections and miscellaneous property $3,802,544.50, has that item increased since October 31st?

A. Yes, sir, it has.

Q. This, then, is not in excess of the present amount?

A. No, sir, it is less than the present value.

Q So, too. as to materials and supplies, $616,470.08?

A. Also a greater amount on June 30th, 1906, than on October 31st, 1905.

Q. The item Plant, manufacturing and holders, $16,087,
424 428.72, Mr. Bradley has testified that recently the large holder at 132d Street has been completed. Then that holder or portion of it, I suppose, was not included in the $16,087,428.72, was it?

A. No, sir; possibly some of the cost is there but at the present time all of the cost is in the books.

Q. Could you tell what at the present time the plant equaled on June 30th, last?

A. Yes, sir.

Q. Including the holder as it now stands?

A. $16,319,811.69.

Mr. GANS: I assume all these questions mean book value, don't they, Mr. Mathewson?

Mr. MATHEWSON: Yes they do.

Q. That is the most substantial increase of any of these items except the increase in the investment at Astoria since October 31st, last?

A. Yes, sir.

Q. Referring again to your estimate of the cost of reproduction present of the item meters, meter cocks and connections on the books at $3,802,544.50, in what manner does the amount pay for the various items constituting that come under your eye?

A. The department which looks after the detail of issuing the orders for these materials and supplies is under my supervision; I am familiar with most of the dealers with whom they are transacting business, and I have occasionally to consult with the purchasing agent regarding prices and purchases. Some of the materials and some of the items covered by that statement are purchased under contract, and the contracts are in my custody and the bills before payment are submitted to me.

Q. And checked and entered in your department?

A. All checked and entered through the accounting department, which is under my supervision.

Q. And are these items, such as pipes and specials, meters,
425 cocks and connections and things of that sort, and stoves, items which are being currently and constantly purchased by the company in one amount or another?

A. Come under my supervision.

Q. I say, are they being currently purchased by the company?

A. Yes, sir; constantly being purchased, stock renewed, and additions made to the stock. Of course in the meters, the number of meters that the company has in use and in the district are constantly increasing.

Q. And do you know from your record and from these bills that come under your notice and are you, and were you able to tell what is the current price which is being paid by the company for them?

A. Certainly.

Q. And in making up your estimate of four million dollars and such a matter for the reproduction of the items included in this $3,802,544.50, do you make use of such current quotations and prices?

A. Those are the figures that are used in arriving at the cost of reproducing that property.

Q. Take pipes and specials, for instance, can you tell how much of the $3,802,544.50 they constitute?

A. $113,259.64 on October 31 1905.

Q. Are they purchased under contract now?

A. Most of the material that is carried in that account is purchased under contract; that is, the cast iron pipe and the special castings because that is material that is used principally in extending and repairing the mains; and large pipe and large special casting.

Q. Are those contracts in your possession?

A. Yes, sir.

Q. Do you know what is being paid for those? Have you the record, and had you the record?

A. I have the records. I may say, in respect to the pipe for which
426 we have contracted with the United States Cast Iron Pipe and Foundry Company, that it is purchased by weight and the prices vary with the different sizes of pipe.

Q. And did you use the current figures in computing your estimate?

A. The current figures. Now, with respect to the pipe and specials, that stock is carried on the books at its cost. As it employed either in extending mains or repairing mains, it is taken out of stock at its cost, and at its purchase it is added; so the book value of pipe and specials is its actual cost value in each case; there is no estimate about it whatever.

Q. As to meters, what proportion of that $3,802,544.50 is composed of meters?

A. $2,941,037.07.

Q. Is the company buying meters from time to time currently?

A. Yes, sir.

Q. And do you know from the meter bills and from the records which you keep as to what they are currently paying for meters?

A. Yes, sir.

Q. And from whom the meters are bought?

A. Yes, sir.

Q. And in making your estimate as to the present value of meters did you take the actual current cost to the company of meters, as they are now paying?

A. Exactly, yes, sir.

Mr. GANS: We should not have had any objection to the question if you had asked as to the cost; the objection I made was as to value.

Mr. MATHEWSON: Yes. He says in computing the present value he has taken the current cost. I assume that is the value plus, of course, some value for setting the meter in place; the value is the cost of the meter plus the cost of setting. You observe the meters take nearly $3,000,000 out of the whole $3,802,544.50.

Q. As to cost of connections, what proportion goes for that, of the total $3,802,544.50?

A. $313,714.47.

427 Q. And in making your estimate as to the present value or cost of reproduction of those, did you take the cost of the same character of material as the company is now purchasing?

A. Is now purchasing at the current rates, yes, sir.

Q. How about gas stoves, how much is included there for gas stoves?

A. $287,619.77.

Q. And would you make the same answer to the same question in reference to that item?

A. The same, yes, sir; with the exception of certain stoves that are carried in there which are stoves that are in stock and are carried at their actual cost and appear in a monthly inventory of stock, they are taken in that case at their actual cost. In the cost of rented stoves in the district, the value of those stoves is computed at the current prices that are being paid for the same kind of stoves.

Q. Plus the cost of installation?

A. Yes, sir.

Q. You mean in your estimate of present value?

A. Present value.

Q. Taking the items as they appear on the books making up the $3,802,544.50, book value, does that amount represent the cost of these various items to the company, less, of course, anything charged off for depreciation or replacements?

A. That is what is represented, yes, sir.

Q. The cost as distinguished from present value, in other words, on the basis of reproduction?

A. Precisely.

Q. As to the items in Exhibit 81, "Materials and Supplies, $616,470.08," can you conveniently say what that is on June 30, for our information, if there is any considerable increase?

A. $686,511.10 was the value on June 30.

Q. And are you, from your records and data and the bills that come under your notice, familiar with what is currently paid for items of that character?

A. Yes, sir.

428 Q. And from that you testify that these are the costs?

A. Exactly. In that case no estimate is made whatever, the book value there is the actual value at which they are carried on the books; that is, the actual value and the book value are identical.

Q. The materials and supplies, in other words, are those which have been bought very recently, have they not, in those cases?

A. Yes, sir.

Q. I ask you also as to the items "Real Estate and Plant" whether the book values there are the cost to the company?

Mr. BURR: Objected to as incompetent, immaterial and irrelevant. Question allowed; exception.

A. Yes, sir.

Q. Mains and services the same?

A. The same, yes, sir.

Q. Is it not the fact, Mr. Carter, that all or substantially all the materials and items included in the $3,802,544.50, as well as in the item of "Materials and Supplies," $616,470.08, have been purchased or acquired by the company since its formation?

A. All, yes, sir.

Q. While on the other hand certain of the real estate and of the plant and of the mains came over from the subsidiary companies?

A. Yes, sir.

Q. Mr. Simpson testified that the services had all or substantially all been renewed since 1884; do you know anything in reference to that, whether that is an accurate statement or not?

A. That is my understanding.

Mr. BURR: I ask to have that stricken out because he evidently does not know anything at all about it, this witness; what his understanding is, is not evidence.

The MASTER: Strike it out.

429 Q. What is your information?

A. My information is that the services have been almost entirely renewed since consolidation.

Mr. BURR: I ask to strike it out.

The MASTER: Strike it out. It does not add anything for my information.

Q. Referring to the item "Accounts Receivable," $2,000,000 of which you stated you considered a fair continuous working capital, in that shape, can you say whether the accounts receivable on June 30th exceeded those on October 31st, as shown?

A. They did, by nearly a million dollars.

Q. Can you tell us what the Accounts Receivable from sundry consumers and debtors, being the items respecting which one of opposing counsel asked you, amounted to on June 30th—the same ones I refer to as you said amounted to Twenty-three hundred thousand dollars.

A. $3,449,780.95.

Q. What is the effect of the increase of the company's business on the requirement for working capital in the shape of cash and accounts receivable?

Mr. BURR: Objected to as incompetent, immaterial and irrelevant: I believe that what we are trying out here is whether the rate fixed by the Legislature and by the Commission was justified by the facts represented and then existing at the time the case was tried before them. The conditions that have occurred since that time and are now existing, so far as increase of expenditures, the increase of the investment in property, I don't think is a proper consideration in this inquiry. Was the Legislature justified as the facts existed at the time they passed this legislation, in fixing this rate at 75 cents? Was the Legislature justified upon the facts presented in fixing their
430 rate at 80 cents? Was the State Gas Commission justified from the same state of facts presented before it, as they then existed, in what they did? What additional expenses or replacements or betterments have caused this company to spend more money since that time I do not think is proper inquiry.

Mr. MATHEWSON: I did not ask that. I merely asked what effect on the amount of working capital required in the shape of either accounts receivable or in the shape of cash the increase of the business of the company had.

Mr. BURR: You have been asking with regard to the differences in expenditures from October 31st, 1905, to June 30th, 1906.

Mr. MATHEWSON: That is not what I asked him.

The MASTER: As I understood the question, he wants to bring out and get on the record what I suppose is more or less of a truism, that the more business you do the more capital you have to have.

Mr. MATHEWSON: Yes, you have to look to the future and not to the moment in making a rate for gas.

The MASTER: I will allow it and give an exception.

Mr. BURR: Exception.

A. The increase in the volume of business of course has a very direct bearing upon the company's requirements of working capital, both in respect to the accounts receivable and the cash it has to carry.

Q. And when I asked in reference to the cash working capital

required and you answered One million dollars; and accounts receivable, and you said Two million dollars was fair, I intended of course to ask the amount which was required for the reasonable conduct of the business of the company, fairly required; is that what you understood me to mean?

431

A. That is what I understood. Our present accounts receivable.

Q. Considering the present and the outlook for the immediate future——

A. We require more than that at present, but we consider the present conditions abnormal.

By Mr. GANS:

Q. That is by reason of this litigation—the people are not paying as promptly as they would otherwise, possibly?

A. Well, of course, as of October 31st that would not appear, that would not have affected those figures.

Q. No, but as of the present?

A. As of June 30th, yes, I think probably the accounts receivable have been augmented somewhat by that condition. The outstanding was probably larger than it would otherwise have been.

By Mr. MATHEWSON:

Q. Are the shares of the Consolidated Gas Company listed on the New York Stock Exchange?

A. Yes, sir.

Q. Are you able to say from your observation whether they are largely dealt in and have been in the past?

A. I don't feel so sure of that. They have been largely dealt in, yes. I have seen evidence occasionally of large sales in the market.

Q. You sign transfers of stock?

A. Transfers of Stock come before me, and in some cases they are very heavy. In 1905 we had over 4,000 transfers of stock.

By Mr. GANS:

Q. That does not mean 4,000 shares transferred?

A. No, sir, 4,000 transactions.

432 By Mr. MATHEWSON:

Q. Was a statement prepared for the State Commission showing the high and low price of the sale of stock on the Exchange for some years past, do you remember?

A. No, I am not aware of there having been a statement of that kind prepared, I don't recall it if there was.

Mr. MATHEWSON: There was one, I am pretty sure, yes, here it is, page 2180 of the proceedings before the Gas Commission.

Q. Well, are you able to say or have you ascertained what the average prices of the stock on the New York Stock Exchange was from the year 1901 down to date, say the past five years?

Mr. GANS: I do not think this witness is competent to testify to that.

Mr. MATHEWSON: Subject to your verification. The Federal Courts in some instances have said that that was one thing, among others, to be taken into consideration in determining the value of property.

The MASTER: The only point is, I assume that some of this objection is as to this method of proof, the competency of this witness. Unless counsel are strenuous about it, if there was a tabulation put in before the Gas Commission I should think it would be much better to allow that to go in now rather than compel Mr. Mathewson to summon the *Financial Chronicle* and some Wall Street man here to put in the average price.

Mr. GANS: I merely want it subject to verification.

Mr. MATHEWSON: It is so public you can ascertain it immediately.

433 A. The price in 1901 was about $214 a share; in 1902 it was $220 a share; in 1903 it was $193 a share; in 1904 it was $201 a share; in 1905 it was $191 a share; and during the week ending May 7, 1906, it was as low as $132 per share.

Q. Do you know where it is now?

A. It is about $140, I think.

Mr. MATHEWSON: Cannot we spread on the record here say five years? I do not think it is necessary to go away back unless you desire to.

Mr. GANS: We might as well put in the whole exhibit.

The MASTER: It being understood it is subject to verification and correction by any party.

Mr. MATHEWSON: I offer in evidence then paper entitled "Consolidated Gas Market Quotations on Capital Stock" which will be found on page 2180 of the proceedings before the Gas Commission.

Received in evidence as Complainant's Exhibit 82, but not marked.

Q. Can you tell how many stockholders there are of the company, approximately?

A. About 4500.

Q. Can you tell how many of them hold ten shares or less?

A. A memorandum of that was made a few weeks ago, which showed that the number of stockholders holding less than ten shares was about 838; from 10 to 25 shares, 765; from 25 to 50 shares, 675; from 50 to 100, 726 shareholders.

Q. Are any of the shareholders of the company non-residents of this city—are they scattered?

A. Yes, sir; a great many are non-residents, over 700.

By Mr. GANS:

Q. You say that simply from information from the books?

A. Information from the books.

434 By Mr. MATHEWSON:

Q. What rate of dividend has the company paid since its organization?

A. Average rate?

Q. Yes.

Mr. GANS: I object to the average.

Q. Well, give it——

Mr. GANS: Let us have it year by year.

The WITNESS: I have a statement showing it at the end of each year.

Q. That is better yet, I didn't know you had it; let us have it.

The witness produces a paper.

Q. Is this the statement which you produce, a statement of the rate of dividend paid each year by the company since its organization?

A. Yes, sir.

Q. Each calendar year?

A. Yes, sir, and for the six months ending June 30th, 1906.

Mr. MATHEWSON: I offer that in evidence.

Received in evidence and marked Complainant's Exhibit 83.

Q. Excluding the six months ending June 30, 1906, there appears by Exhibit No. 83 that the dividend has run from 3 per cent. to 8½ per cent., minimum and maximum?

A. Yes, sir.

Q. Have you computed the average rate?

A. Yes, sir.

Q. About what is it?

A. 6½ per cent.

Q. That is, excluding the last six months?

A. That is, excluding the last six months.

Mr. MATHEWSON: I offer in evidence a paper entitled "Con-
435 solidated Gas Company of New York Dividends Calculated at 8 per cent. and excess of 8 per cent. over dividends actually paid from 1885 to 1906."

Mr. BURR: Same objection as we made to the other papers.

The MASTER: Yes.

Exception.

Mr. BURR: I understand Mr. Mathewson says if we need to make an examination for the purpose of verifying the statements contained in that exhibit we may have that opportunity.

Mr. MATHEWSON: These amounts, if we do not let you examine the records yourself, I suppose you can compel the production of them for the purpose of your examination. In other words, I understand it is admited without precluding you from any rights which you have of verification.

Mr. BURR: I understand it is admitted, and, not being the best evidence, we will have an opportunity of verifying it from the books.

Mr. MATHEWSON: These amounts?

Mr. BURR: Yes.

Mr. MATHEWSON: Yes.

Objection overruled. Exception.

Received in evidence and marked Complainant's Exhibit 84.

Q. The column under "Dividend Paid" represents, I assume, the actual money that was paid in dividends on those dates?
A. Yes, sir.
Q. And the next column to the right represents the amount that would have been required for dividends provided dividend had been computed at 8 per cent.?
A. Yes, sir.
Q. And the fourth column the excess paid——
A. No, the excess calculated.
Q. Well, in some cases?
A. Yes.

436 Q. The excess paid over 8 per cent., or the amount paid less than 8 per cent. as indicated?
A. Yes, sir.
Q. What is the significance of the figures in red near the bottom of the last column, $400,000, and under that $400,000?
A. In the case of those two dividends the rate paid was in excess of 8 per cent. per annum.
Q. In all other cases?
A. The dividend was either 8 or less than 8.

Mr. GANS: May I suggest that the stenographer make the note that where it appear- in red ink the figures be in italics and a note to that effect be made on the page?
The MASTER: Yes.

By Mr. GANS:

Q. Can you tell me whether the dates on Exhibit No. 84 are the dates of declarations of dividends or the dates of payments?
A. The dates of payments.
Q. And is there any fixed relation between the dates of payment and the dates of declaration?
A. No, the declaration would simply be made early enough to provide for the closing of the books, in time for the making up of the lists, &c.
Q. The declaration is usually about a month prior to payment, is it not?
A. Usually a little more than that.
Q. A month or six weeks?
A. Yes, sir.

By Mr. MATHEWSON:

Q. Can you tell me how many consumers the Consolidated Gas Company has?
A. We have 289,000 consumers using ordinary meters and 97,000 consumers using prepayment meters; that would make 386,000.

437 Q. Has the number of consumers been increasing or decreasing?
A. The increase is a small percentage.
Q. Has there a statement been prepared showing the output of gas of the company from 1884 down to date, the cubic feet per year?

A. I think I have such a statement, yes (producing statement). I think this is probably what you want. Does your statement run below that point?

Q. No.

A. Is that it (producing statement)?

Q. Yes, haven't you it down to date?

A. No, sir.

Mr. MATHEWSON: Is there any objection to my taking this statement, and then letting the amount be added since 1904?

Mr. PAGE: You mean to bring it down to October 31st, 1905?

Mr. MATHEWSON: Yes, or if possible, down to June 30th.

The WITNESS: I can bring it down to June 30th or October 31st, just as desired.

The MASTER: Why not bring it down to both?

Mr. MATHEWSON: I think you had better bring it down to October 31st separately.

The MASTER: That is what I mean.

The WITNESS: And then fill in the other, and make a new total?

Mr. MATHEWSON: Yes. I offer in evidence this paper headed "Consolidated Gas Company of New York, sales by feet during each year from November 11th, 1884, to June 30th, 1906."

Mr. BURR: Same objection as before.

The same ruling and exception.

Received in evidence and marked "Complainant's Exhibit 85."

438 By Mr. GANS:

Q. Are these the calendar years that appear on Exhibit 85, except as specified for the year 1884, which seem to be somewhat different?

Mr. PAGE: And the year 1906, which is to be added.

A. Yes, sir; taking the ten months of 1905 and the six months of 1906.

Q. Can you not give us the whole year 1905?

A. Yes, it will show that.

Mr. PAGE: I think it will be well to put the nominal years and the actual years separately.

By Mr. MATHEWSON:

Q. Have you also prepared a table showing, from 1885 down to and including the calendar year 1905, or a statement showing the meters, sales per cubic foot, average sales per mile of main, sales per meter and unaccounted for gas?

A. I have such statement down to and including the nominal year ending October 31st, 1905.

Mr. MATHEWSON: You had better complete that down too, showing the calendar years also; I will offer that in evidence.

The same objection, ruling and exception.

Received in evidence and marked Complainant's Exhibit 86.

Q. Those records are in your possession, are they not?

A. Yes; from which this statement was made up, as appearing by the books.

Mr. GANS: As appearing in the books; we do not want to be bound by any such testimony that so much gas has been made and wated.

439 Mr. MATHEWSON: I have further evidence to present by this witness, but it will be on another phase of the case, in reference to the cost of gas, and I think I will recall him for that purpose, having dealt with the assets, and submit him to cross-examination on that point.

Mr. PAGE: We would like to reserve the cross-examination of this witness until we have time to study these questions, and become a little more prepared.

Cross-examination by Mr. BURR:

Q. I might ask you in regard to the books of the Company, and something as to the methods of accounting. How long have you had charge of the accounting department, prior to becoming secretary of the company?

A. Several years.

Q. About how many years?

A. I should say ten.

Q. And will you describe how the accounting department is formed? Is it sub-divided into departments having control of special subjects of the company?

A. No, there is but one department.

Q. Is the real estate department, for instance, part of the accounting department?

A. No, not at all, although the records of the value of real estate or the purchase and sale of real estate would be kept on the general books, and the entries would be made in the accounting department.

Q. Then there is a meter department, is there not?

A. A meter department, yes.

Q. Then there is a main department, or department of mains?

A. Department of mains.

Q. And then there is an engineering department?

A. Yes.

Q. There is a cartage department, is there not?

A. The company owns some horses and does some carting, independently of the National Coal & Coke Company's carting,

440 and the care of the stables and the care of the horses is under one individual particularly.

Q. Well, the whole business of the company is sub-divided into departments?

A. Absolutely.

Q. Are there any other departments than those I have just stated?

A. At the branch offices they have in turn their departmental organization. We have at the branch office the superintendent and his assistant, chief clerk, application department, cashier's department, collecting department, arrears department, and bookkeeping department.

Q. Do all these different departments send their statements to the accounting department?

A. Yes.

Q. And what is done with the statements furnished to the accounting department? For instance, by the engineering department, of which Mr. Bradley is the head?

A. The accounting department gets such data as it requires for its department from the records in the engineering department, these records being made up from daily reports made by the stations to the engineering department of their transactions. Those are aggregated at the end of the month and furnish us with such data as we require for the purpose of making up the accounts as to cost of material used at the stations.

Q. Do they render monthly accounts or yearly accounts?

A. The stations, to the engineering department?

Q. Yes.

A. Daily accounts.

Q. And how often does the engineering department render accounts to the accounting department of the company?

A. They do not render any accounts to the accounting department. The accounting department has access to their records and uses them.

Q. In what way—sends an examiner to inspect them?

A. It is right in the same building; only a floor dividing
441 the two departments, and they get such data as they require from the engineering department's records.

Q. You send someone from your department to examine the books of some other department?

A. That is the case exactly.

Q. You do not examine them yourself?

A. No, sir, except occasionally for some specific reason.

Q. And the results of such examination, or entries, are taken from the books of the engineering department, we will say, and put in the books kept in the accounting department?

A. Precisely.

Q. You do not pretend to testify here to the accuracy of every statement that you have presented, do you?

A. I believe them to be correct. They are made under my supervision and direction. I have no reason to doubt their accuracy in any way, manner or shape.

Q. You do not make entries yourself in the books?

A. I do not.

Q. So that you must rely upon the accuracy of someone else who does make the entries?

A. I do have to.

Q. And that party has to rely upon the accuracy of the man who transcribes them from the books of the different departments?

A. It is not altogether a case of trusting to accuracy; there are always proofs and checks upon entries that are made that establish their correctness. An error made would disclose itself in the course of time. It is not left to chance.

Q. For instance, with regard to abandoned mains. Do you receive any special account with regard to those abandoned mains?

A. No, we take the street department's records of mains abandoned during the year, and that forms the basis of an entry upon the books, by which we take that value out of the mains account and charge it to replacement account.

442 Q. I understood you to say a little while ago that there were some inaccuracies in making up the report for the Tax Commissioners, and gas mains actually abandoned had been put in that account?

A. Rather not inaccuracies, perhaps. I did not describe it very well. Evidently the clerk did not understand, who furnished those figures, that the figures that were required for that report did not include abandoned mains. The figures that he gave were correct but they were not the figures that were required for that particular report, so it was rather a misunderstanding of what he was to furnish rather than an inaccuracy that led to that difference between the report and Mr. Simpson's affidavit.

Q. Well, you made up the report, I understand?

A. No, not personally. The report is made up under my supervision.

Q. By whom?

A. By—well, by anyone whom I might at any particular time have delegated to make it up. I should have to see the report now to determine that.

Q. I call your attention to Exhibit No. 169, page 2193 of the proceedings before the Gas Commission, and ask you to look at it and see whether that refreshes your recollection?

A. Are you referring to this or this? (Indicating.)

Q. Referring to that at your left.

A. This is something about the Boston Consolidated Gas Company. I don't know exactly——

Q. I am speaking now of this (indicating), page 2181, Exhibit No. 167.

A. What is the question?

Q. I call your attention to Exhibit 167, page 2181 of the proceedings before the Gas Commission and ask you to look at it and see whether that refreshes your recollection as to who made up the report under your supervision or helped to make it up.

Mr. MATHEWSON: That is a printed copy, Mr. Burr. I
443 don't know whether it will help him or not.

The WITNESS: It does not give me much information, still I do recall that for that year 1904, the figures were filled in largely by our chief accountant.

Q. What is his name?

A. Mr. Brundage.

Q. What is his full name?

A. H. M. Brundage.

Q. And will you tell us, Mr. Carter, how the discrepancy arose between the number of miles of mains furnished by Mr. Simpson and the number of miles of mains as it appears in that report?

Mr. MATHEWSON: This is not the report, Mr. Burr, of June 30th,

1905, which was employed by Senator Page in his question. This is 1904 and Mr. Simpson has not testified——

Mr. BURR: I will amend my question, to June 30th, 1905.

Mr. MATHEWSON: As brought down by the supplemental report to November 1st, 1905.

Mr. BURR: I will accept that amendment also.

A. The difference arose from the fact that there was furnished to the clerk who made the report to the State Board of all the mains that the company had in the ground, including abandoned mains, which had been taken out of the books as to their value and as to the mains themselves, whereas Mr. Simpson's report dealt with the mains that were in use and certain disused mains that were not abandoned that were likely at any time to be put into use.

Q. Well, finally you got in your department an exact account of the mains that had been abandoned?

A. As to the feet, yes.

Q. As to the number of feet?

A. As to the number of feet and the size of the abandoned mains.

444 Q. And not as to their location?

A. No, not as to their location.

Q. Any particular reason for not having an account as to their location?

A. The only reason that we had no use for such information.

Q. When the main was abandoned you had not further use for knowing where it was?

A. None whatever.

Q. What was your position with the—what company was it that you state you were with before November, 1884?

A. The New York Gas Light Company.

Q. What territory did that company operate in in 1884?

A. The district south of Grand Street at that time.

Q. To the Battery?

A. To the Battery.

Q. Embracing all the southern part of the city?

A. All the southern part of the city south of Grand Street.

Q. How long had you been with that company?

A. I had been with that company since February, 1877, about 7 years.

Q. What was your business or occupation while with that company?

A. Well, I entered the service of the New York Company as a boy, an office boy, and at the time of consolidation I was keeping some of the records and some special accounts, such as the city accounts.

Q. So that your whole life practically up to the present time has been spent with that Gas Company and with the Consolidated Gas Company?

A. Yes, sir.

Q. You are the secretary of the Consolidated Gas Company?

A. Yes, sir.

Q. Are you a stockholder in the Consolidated Gas Company?

A. Yes, sir.

Q. Were you a stockholder in the New York Gas Light Company?

A. No, sir.

445 Q. Did you take any active part in the consolidation of the New York Gas Light Company and the other companies into the Consolidated Company?

A. No, no particularly active part in it. I was simply aware of the consolidation transpiring. I had to do with the issuing of the stock of the Consolidated Company which was issued in exchange for stock of the companies which consolidated at that time.

Q. Did you make any report to the Consolidated with regard to any of the property that was absorbed by it?

A. No, sir.

Q. Were you acquainted with Mr. Rowland, the engineer who was employed by the Consolidated Gas Company at that time, November, 1884?

A. I had met him——

Mr. MATHEWSON: Just a minute. Mr. Burr will admit the correction that he was not employed by the Consolidated Gas Company. He made his appraisal some months before the Consolidated Gas Company came into existence. He appraised the plants of the constituent companies before the Consolidated was created.

Q. After November, 1884, you became chief accountant of the Consolidated?

A. Subsequent to that date; not at that time.

Q. You know nothing yourself of the exact condition of the companies that were absorbed into the Consolidated Gas Company, do you?

A. Why, the exact condition with respect to what?

Q. Outside possibly of the New York Gas Light Company?

A. With respect to what?

Q. With respect to their financial condition?

A. I was familiar with their accounts, their books of accounts. After consolidation they were more or less in evidence.

446 Q. I am speaking now prior to November, 1884; you were not acquainted with the financial condition of any of these companies that were subsequently merged into the Consolidated Gas Company?

A. No, not prior to that time.

Q. After November, 1884, did you take up an examination of their books?

A. No.

Q. Did you take any active part, by an examination of the books of these companies, in ascertaining their exact condition financially?

A. No, sir.

Q. Who did?

A. I don't know positively.

Q. You only commenced to take an active part in the Consolidated after these figures had been arrived at that you have testified to with regard to the values which were placed upon the property of each company?

A. My knowledge practically started from that time, yes, sir.

Q. You had no part or participation in fixing those values, did you?

A. No.

Q. So far as you were concerned, that was the starting point of your accounting department?

A. Yes, sir.

Q. This thirty-seven million——

A. $37,775,000.

Q. And were the books of these companies that were merged into the Consolidated Gas Company turned over into the accounting department of the Consolidated Gas Company?

A. Yes, sir.

Q. Are those books still in existence?

A. Yes, sir.

Q. Do you still continue to keep a separate set of books for each of those companies?

A. No, sir.

Q. The use of those books was discontinued after November, 1884?

A. Yes, sir.

Q. Now, do you keep a separate set of books for the New Amsterdam, the Standard and the Mutual?

A. I do not keep any books for those companies.

Q. Do I understand, then, that they so far preserve their own entity that they have their own accounting department?

A. Decidedly, yes, sir.

447 Q. They have their own president?

A. Yes.

Q. And cashier?

A. Yes, sir. A complete organization.

Q. A complete organization?

A. Yes, sir.

Q. And are the books of these respective companies kept in their own offices?

A. Yes, sir.

Q. Where do you get your information from to enter into your books as to the amount of gas purchased during any given year from these three companies, or either of them by your company?

A. In the shape of a statement from them made monthly.

Q. Do you know the names of the companies that the Consolidated absorbed or had merged into itself?

A. Yes, sir.

Q. They were the New York Gas Light Company, the Manhattan Gas Light Company, the Metropolitan Gas Light Company, the Municipal Gas Light Company, the Knickerbocker Gas Light Company, and the Harlem Gas Light Company; is that correct?

A. Yes, sir.

Q. Do you know how much stock of the Standard Gas Light Company, the Consolidated Gas Light Company purchased, what percentage of its stock?

A. I would not like to say from memory; of course it is all a matter of record on our books.

Q. Was it not 92.28 per cent.?

A. I should say that that figure was substantially correct.

Mr. MATHEWSON: Mr. Burr, if you want that information, would it not be well for the witness to prepare a short memorandum to show exactly how many shares the Consolidated held in each company?

Mr. BURR: I have it right here, Mr. Mathewson.

Mr. MATHEWSON: If the witness knows, but he is merely saying that he thinks it is about that.

448 Mr. BURR: He may correct me from an examination of the books if I am not correct.

Mr. MATHEWSON: Very good.

Q. Does not the Consolidated Gas Company own 51.31 per cent. of the Mutual Gas Light stock?

A. I should say approximately.

Q. Does it not own one hundred per cent. of the Westchester Lighting Company?

A. I guess it owns all the capital stock

Mr. MATHEWSON: That is not a gas company; it is an electric company.

Q. Does it not own 99.63 per cent. of the New Amsterdam Gas Company?

A. It is very possible.

Q. No. I don't want possible. I want you to come as near your positive knowledge on that subject as you can.

A. I cannot tell you that percentage exactly, Mr. Burr. I should say that that would be approximately correct.

Q. Through the ownership of 99.63 per cent. of the New Amsterdam Gas Company it controls the Equitable Gas Company and East River Gas Company and New Amsterdam Gas Company, doesn't it?

Mr. MATHEWSON: Let us not enter into confusion, because the present New Amsterdam Gas Company was formed by the consolidation many years ago of the Equitable Gas Company of New York, the New York and East River Gas Company and the New Amsterdam Gas Company then existing, and of course they passed out of existence then, and they are not controlled by anybody. The New Amsterdam Company is it, it is the result of that consolidation.

449 The WITNESS: That is the case.

Mr. BURR: Is that your statement, that you want to have entered on the record, instead of his answer?

Mr. MATHEWSON: I understand that to be the fact.

The WITNESS: I did not make any answer to the question. I will accept Mr. Mathewson's statement.

Mr. MATHEWSON: Is that as you understand it?

The WITNESS: That is precisely as I understand it.

Mr. MATHEWSON: Of course you are asking about another corporation of which he is not an officer and the records of which he has no knowledge of except as he hears these things.

Q. The East River Gas Company controls the East River Gas Company of Long Island City, doesn't it?

Mr. MATHEWSON: I ask you not to answer these questions unless you know or have some accurate source of information.

Q. If you don't know, say so, Mr. Carter.

A. What is the question?

Q. I say the East River Gas Company controls the East River Gas Company of Long Island City, and in the East River Gas Company of Long Island City the Consolidated Gas Company owns 100 per cent. of the stock?

A. I cannot confirm that statement, Mr. Burr.

Q. You would have some record of what amount of stock it does own in that company?

A. Well, what company owns in what company?

450 The MASTER: That the Consolidated Gas Company owns.

Q. The Consolidated Gas Company.

A. Directly it owns no stock of any East River Gas Company or any East River Gas Company of Long Island City.

Q. Well, indirectly.

Mr. MATHEWSON: Well, that is a conclusion of law which I object to.

Mr. BURR: The witness qualifies the statement himself; he says indirectly. I want him to explain what he means by indirectly.

Mr. MATHEWSON: He did not say indirectly, but he said not directly.

Q. Does it own stock in that company indirectly?

A. I should say not. I don't think it would own it unless it owned every share of the stock of the company. We hold no stock of the East River Company.

Q. Does it hold any stock in the company, and if so how much to your knowledge in the East River Gas Company of Long Island City?

A. No, it does not.

Q. And in the East River Gas Company?

A. No, it does not.

Mr. MATHEWSON: I do not think there is any such corporation. I may be wrong.

The WITNESS: I have never heard of them.

Mr. PAGE: I think there are.

Mr. MATHEWSON: There was the New York & East River Gas Company, and that consolidated with the Equitable and the New Amsterdam Gas Company to form the present New Amsterdam Gas Company. Now the New York & East River Gas Company owned, my recollection is, some of the stock or all of the stock of the
451 East River Gas Company of Long Island City, which was a wholly different corporation.

Mr. BURR: The East River Gas Company, is that right?

Mr. MATHEWSON: The East River Gas Company of Long Island City.

Mr. PAGE: The East River Gas Company of Long Island City now controls the tunnel and the rights in the streets in Long Island

City, and the New Amsterdam Gas Company owns all the stock of the East River Gas Company.

Mr. MATHEWSON: By reason of its being the result of the New York & East River Gas Company consolidation, the New York & East River Gas Company having owned the stock of the East River Company. Is not that right?

Mr. PAGE: I think that is right, and they preserve their right to the tunnel and the streets in Long Island City.

Mr. MATHEWSON: But Mr. Burr is referring to the East River Gas Company and the East River Gas Company of Long Island City, whereas there is but one corporation to my recollection.

Mr. PAGE: There was the New York & East River Company and the East River Company of Long Island City.

Mr. MATHEWSON: Yes.

Q. You don't know whether the Consolidated Gas Company owns 100% of the stock of the East River Gas Company of Long Island City, do you?

A. I know it does not own it.

Q. And you don't know whether it owns any stock of the company known as the East River Gas Company?

A. I know that it does not own any such stock.

452 By Mr. MATHEWSON:

Q. Do you know that there is such a company as the East River Gas Company, as distinguished from the East River Gas Company of Long Island City?

A. There is no such company that I know of.

By Mr. BURR:

Q. Do you know that such companies are controlled by the New Amsterdam Gas Company?

Mr. MATHEWSON: I think that is objectionable, Mr. Burr. I ask the Master if it would not be better to ask whether it owned stock of the East River Gas Company; whether it amounts to a control or not is a conclusion.

Mr. BURR: I press my question, he may answer yes or no.

The MASTER: He may answer what he knows about it. Manifestly it is not the best evidence.

Q. (Question repeated.)

Mr. MATHEWSON: I object to it as irrelevant and immaterial to the inquiry before the Master.

Objection overruled; exception.

A. "Such companies" do not help me out any. I ask for a repetition of the question. I want to know what companies.

Q. (Question repeated.)

A. I don't know of any such company, consequently I answered the second question, it seems to me.

Q. You don't know that the New Amsterdam Company controls the Equitable, the East River and the old New Amsterdam Gas Company?

A. No, I don't know that.

453 Q. In other words, you don't know what control of other companies the New Amsterdam Company has?

Mr. MATHEWSON: I object to that as a conclusion and as immaterial and irrelevant.

The Master: I will allow it.

Exception.

A. Will you repeat the question?

Q. (Question repeated.)

A. I know that the New Amsterdam Gas Company holds the stock of other companies.

Q. Well, of what companies?

Mr. MATHEWSON: Same objection.

Objection overruled; exception.

A. It holds the stock of the Central Union Gas Company.

Q. How much stock?

Same objection.

Objection overruled. Exception.

A. I cannot say exactly in shares; about 50 per cent. of the stock.

Q. 56 per cent., is it not?

A. No, of the Central Union it owns all the stock.

Q. And how much of the New Amsterdam?

A. Well, this New Amsterdam Company does not exist, as I understand your reference, if you refer to the original New Amsterdam Company, it does not exist, consequently there is no stock of such a company in existence.

Q. Well, of what other companies then?

A. The Northern Union Gas Company.

Q. How much of that?

A. That is the company of which it holds about 50 per cent. of the capital stock.

Q. What about the Central Union Gas Company?

454 A. I have just testified that it owns all of the capital stock of the Central Union Gas Company.

Q. And the Central Union Gas Company owns 66 per cent. of the Northern Union?

A. It owns the balance of the stock of the Northern Union Gas Company.

Q. What other companies does the Consolidated Gas Company hold stock in?

A. Does the Consolidated Gas own stock in?

Q. Yes, and to what extent?

A. Well, I can name the companies, but I could not offhand give you the number of shares. Mr. Mathewson just offered to have such a statement prepared, and if you wish it I can have it prepared.

Q. I will ask you, and you may state what you know about it? It owns 92.28 of the Standard Gas Light Company, doesn't it?

A. I have already testified that I think those figures are approximately correct.

Q. And of the Mutual Gas Light Company 51.31 per cent.?
A. About.
Q. And the Westchester Lighting Company——

Mr. MATHEWSON: That is of the outstanding stock, but not of the authorized stock.

Mr. BURR: He may distinguish it later on.

Q. The Westchester Lighting Company, 100 per cent.?
A. Yes, sir.
Q. The Astoria Light, Heat & Power Company, 100 per cent.?
A. Yes.
Q. What other companies does it hold stock in?
A. The New York Edison Company.
Q. How much stock does it hold in that company?
A. I would not like to say from memory. It holds a very large majority of the stock; very nearly all of it.

Q. And through the ownership of the stock of the New
455 York Edison Company, what other companies does it control?

Mr. MATHEWSON: I object as a conclusion, and immaterial and irrelevant.

Objection overruled. Exception.

A. I can testify as to the ownership by the New York Edison Company of stock of the Yonkers Gas Light Company and of the Consolidated Telegraph & Electric Subway Company; to just what extent I would not like to undertake to testify from memory.

Mr. MATHEWSON: You have forgotten the National Coal & Coke Company, Mr. Burr.

Q. Now you can prepare for me, Mr. Carter, can you not, a statement showing the capital issued by these various companies you have named, showing the amount of that capital stock that the Consolidated Gas Company owns?
A. Yes, sir.

Mr. MATHEWSON: And while you are doing it, if counsel has no objection, will you state the amount at which each of them——

Mr. BURR: One moment. Not only the stocks, but the bonds of each company.

Mr. MATHEWSON: And the amount for which each of them is carried on the books of the company, and where they cost more than that and have been reduced, as you have stated the amount that they actually cost.

The WITNESS: And the cost to the Consolidated Company, including the premium on Consolidated stock?

Mr. MATHEWSON: Yes, as well as the present value at which they are carried on the books, reduced to the par of the Consolidated stock.

456 Mr. BURR: And please prepare a statement of the total investment of the Consolidated Gas Company in the securities of other companies.

The WITNESS: Well, this table would cover that.
Q. That would cover that, would it?
A. Yes, sir.

Mr. MATHEWSON: Except the National Coal & Coke Company, which as I said you had omitted, $50,000.

The WITNESS: I did not name all the companies in which we owned securities, because Mr. Burr referred to something else, but I understand this statement is to cover them all.

Q. Yes, I want to get all your stock investments as distinguished from your investments in the gas plants.

Mr. MATHEWSON: Mr. Burr, in this exhibit No. 80 that we put in appears the stock investments in the Astoria Company, which is our manufacturing department as we regard it, and the Coal and Coke Company which is the carting department. Now all the other stock appears in here, and what you want is for him to itemize that, virtually. There is the $38,643,590.14, that is what the other stock stands for on the books of the company.

Q. Is that correct, Mr. Carter, that the total amount of stock investment of every kind, nature and description of the Consolidated Gas Company are represented by this item on Consolidated Gas Company's Exhibit No. 80, of $38,643,590.14?

A. As being the book value of it?

Mr. MATHEWSON: Included in that item.

457 The WITNESS: Well, may I look at that a moment?

Q. Yes (handing a paper).

Mr. MATHEWSON: Is everything except the Astoria Light, Heat & Power Company and the National Coal & Coke Company, included in that?

The WITNESS: No, not by any manner or means.

Mr. BURR: That is what I thought.

The WITNESS: In the first place I do not see any thirty-eight million dollars on this sheet.

Mr. MATHEWSON: Down near the bottom.

The WITNESS: Oh, yes, the amount invested in the securities of other companies as shown here is $53,041,134.52.

Q. Does that include your investment in Government bonds?

A. That does not include our investment in Government bonds.

Q. Now I want a complete statement of all your investment in other companies and in all kinds of securities?

Mr. MATHEWSON: That is a further request, in all kinds of securities.

Q. You can furnish such a statement as that?

A. Yes.

The MASTER: As of what date, Mr. Burr?

Mr. BURR: As of the dates when acquired.

Mr. MATHEWSON: Well, you had better make it up to October 31, the same as all the others.

The WITNESS: October 31st, the same date as this.

458 By Mr. MATHEWSON:

Q. Let me see if I am not right. Am I right in assuming that all the securities in all the Gas Companies except the Astoria Gas Light, Heat & Power Company and the National Coal & Coke Company are

included in the item, $38,643,590.14, and the following ones to the bottom of the page?

A. The two others aggregating $53,041,134.52.

Q. Everything above that represents what we consider to be directly or indirectly invested in the gas business at book value?

A. Yes, sir.

By Mr. BURR:

Q. Well, you understand that you are to state in that account that you are to make here the date of the acquirement of these stocks?

Mr. MATHEWSON: You cannot do it. That was all gone over, and I don't think you will want it if you look at the testimony before the Commission and the Committee. They were picked up, one share or five shares at a time covering quite a large period in some cases.

Mr. BURR: I know what I want, and I ask Mr. Carter to produce it if he will.

The WITNESS: It would be a very troublesome thing to make a record in the case of the acquiring of the New Amsterdam securities, a period of several years and almost every day in the year. Now you can see what a statement that would mean, probably 300 items a year for three or four years, would make a very bulky statement.

Q. Make it as full as you possibly can, and if I want to go into any further details I will call for them.

459 Mr. MATHEWSON: The same request was made before the Commission and the Committee, and it was finally shown that it would be impracticable without great delay to show it, I think more than, say, year by year, something of that sort.

The WITNESS: Yes.

Mr. MATHEWSON: You remember that such a statement was made up?

The WITNESS: Yes.

Mr. MATHEWSON: Supposing you make up a statement which covers that?

The WITNESS: I think that covers the stock of one company only.

Mr. BURR: If it is too much trouble for you, I will guarantee the Commissioners of Accounts will help you.

The WITNESS: That would be very kind of them, and if I find we are not able to make up a statement to your satisfaction, why, we may avail ourselves of your kindness.

Mr. MATHEWSON: Of *your* suggestion?

The WITNESS: Of your suggestion, yes.

By Mr. BURR:

Q. Do you keep a book showing the stock that you carry on hand of all sorts of material?

A. Well, would you mind referring to some particular material, because we deal with this material in different ways.

Q. Have you a separate book for each kind of material, for
460 instance, have you a book in which no entries are made except purchases of coal?

A. The purchases of coal are a matter of record on the general books, the origin being the bills rendered of coal companies for coal delivered. The engineering department would be furnished in connection with the daily report from the stations the information of the receipt or the delivery to them of coal; in that way the changes in that stock by reason of the receipt of coal from dealers and the employment of it in manufacture or for other purposes would be a matter of record, so that at the end of the month the total quantity of coal received during the month, the total quantity of coal used during the month and the balances on hand at the beginning and end of the month would be a matter of record in the regular records of the engineering department.

Q. Well, now, you do not appear to have experienced any difficulty in getting up a statement of expenses since 1884 of various items called for by Mr. Mathewson. Could you prepare a statement showing the amount of coal consumed each year since 1884 and the amount of oil consumed each year by your company?

A. It would be a very troublesome thing to make——

Q. And the amount and the price paid for it and the kind?

Mr. MATHEWSON: I should object to the production of any statement or going into any such subject at that length most strenuously.

Q. You are able, Mr. Carter, here in Exhibit 78 to place before us this afternoon a tabulated statement of the results or the totals for each year from 1884 to October 31st, 1905, of the real estate, plants,
property and construction as shown in the balance sheet from
461 November 11th, 1884, and on December 31st of each of the following years?

A. That is a very simple and easy thing and stands out on the balance sheet on December 31st, and we simply had to go to twenty different pages on the record of the balances and take off those amounts. It was probably made up in fifteen minutes, and it would take fifteen months to make up such a report as you want.

Q. We don't want to have you bring all your books down here if we can possibly prevent it, but I think we are entitled to ask you to make up a schedule showing the number of tons of coal consumed from 1884 to date, and the prices paid for it, and likewise the number of barrels of oil consumed from 1884 to date and the prices paid for the same?

A. That is quite a different proposition.

Mr. MATHEWSON: I shall object to any such requirement as that, and it seems to me wholly unnecessary and uncalled for. The question before you is as to the value of the assets, the rate of return to be allowed and the cost of gas, so it can be determined what margin shall be allowed. What coal or oil cost in 1884 or what the cost of gas was in 1900, is absolutely no criterion of the cost to-day. The question is what the gas cost, we will say, the past year under current conditions, what is the cost of gas. No such request as this was ever

submitted in any previous investigation, and it evidently was not thought of. We think it is wholly outside of any reasonable requirement.

Mr. BURR: Counsel fails to bear in mind that the other matters were investigations. This is an action in equity. It is an action in which he invokes the equitable powers of this court and brings in long statements here, refusing to allow us to look at the books.

462 And I am asking, as long as this general accountant who is now secretary has been able to make accounts from 1884 to date of particular things demanded of him by counsel for the Consolidated Gas Company, that he make these accounts that I ask for so we may have some means of testing the results he has produced here.

The MASTER: I think you are somewhat in error in your last statement, that he brings in these general tabulations and refuses to allow you to look at the books. The theory on which certainly most of those tabulations were admitted was that they were subject to verification from the books.

Mr. BURR: Yes. My statement was incorrect in that regard.

The MASTER: And there was to be some arrangement made between counsel before this witness would be regared as having finally left the stand by which for the purposes of cross-examination or otherwise if you wanted to verify or amplify any of these figures you would have ample opportunity to do so. Now, of course, I have got no right to require this witness to go off and prepare tabulations for you. If you lay the foundation by showing what particular books you want to cover this question of coal and oil, I will direct the production of those books and you can put in the evidence of the cost of the coal and oil in your own manner from those books. But in so doing you have got to take the risk that if it is unduly prolonged or prolix that you may be stopped by the court.

Mr. BURR: Yes, but your Honor, how are we to get any verifications of any statements made by this gentleman unless we have some right to examine their books for the purpose of verification.

463 They can come in here and say these are the figures which represent an outlay for twenty years, and we are foreclosed in examining them in regard to it, and must accept it unless we want to go into a tedious examination. I do not ask that, and I do not want the books here, but I want this gentleman to give us the same information that he does to his counsel.

The MASTER: You are asking for a tabulation. As I understand, you have a right to send your own men up there and satisfy yourself as to the prices, &c. if the other side consent. That is an entirely different thing from asking this witness to make up a tabulation, which he says will take months.

Mr. MATHEWSON: Of course, if we agree to his sending a man to check these—I do not understand he has a right to unless we do consent, he can ask for the production of certain books. But let me call your attention to the character of the statement that has been presented. That simply calls for the total amount of those particular items on those dates. The amount of oil and coal we used in that

year in the making of gas or which went into the production of gas has absolutely no relation to this. They are not even stated by this witness to be the values. Whether these are the balance sheets at that time you can ascertain simply by looking at the balance sheet of the company as it exists; that is all there is to it—no coal and oil, and there is no foundation for it.

Q. Can you make up such a statement as I have asked you to make up without much difficulty for the past five years say, from 1900 up to date, or to October 31st, 1905?

Mr. MATHEWSON: I want to tell Mr. Burr now that we shall object to spending time going into the cost of gas for even five years. We think it is the present cost of gas, and not the cost of gas in 1900 with which the Master will have to deal. We think it will be a waste of time, and we shall not do it unless the Master or the Court directs us so to do.

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Mr. BURR: The gentleman has just spent a whole day showing what has been done in regard to these things for a period of over ten years, and dividends that have been declared, and all the other things done with regard to the property of this company for a series of years past. I am willing to limit myself to getting information from this gentleman, who has control of it, and who can easily produce it for the past five years, from 1900 to October 31st, 1905.

(The question is repeated by the stenographer.)

The MASTER: Counsel says he will object to it.

Q. Then, will you produce the books containing that information for the past five years, so that we may look at them?

Mr. MATHEWSON: I shall say that the witness will not, if he accepts the advice of counsel.

Mr. BURR: Then I will ask the Master; will he direct the production of these books?

The MASTER: You will have to lay a better foundation than you have now. I must know exactly what books they are and what accounts you want, and you will have to cross-examine the witness until you find out.

Mr. MATHEWSON: I shall present a statement, if the Master please, showing the cost of gas, or elements of the cost, for the latest convenient period, which we think will meet all requirements, and we shall submit to the Master whether that does not cover all requirements, as far as the cost of gas is concerned. I may say that while the Gas Commission desired some information, perhaps, for a previous year, I think 1904, as well as for the year 1905, when they came to discuss the cost of gas they never mentioned it; nothing but the last year, 1905; and to go back to 1900 with this vast array of detail that would be required, it seems to us would be wholly unreasonable and would not assist this inquiry. If you will glance through the printed volume before the Gas Commission, upon the question of cost, station cost, and one thing and another, relating to but a single year, your Honor will appreciate more fully than you do now, I think, what a mass of in-

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formation that would entail and what a waste of time it would be in arriving at a conclusion.

At 4.30 o'clock P. M. adjourned until tomorrow, Tuesday, July 24th, 1906, at 10.30 o'clock A. M.

Last Exhibits:

Complainant's 86.
State A.
City 1.

467 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, TUESDAY, *July* 24, 1906—10:30 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Br. Burr, Mr. Taylor.

468 Mr. MATHEWSON: There are one or two corrections I would like to make in the record; on page 404 the record should read, "Will you tell what portion of the $20,000,000 of debentures which the July 1st, 1904, resolution authorized were actually issued."

Page 412: "Extensions would be checked," instead of "established."

Page 438: "Taking the ten months of 1905 and the six months of 1906" instead of "the ten months of 1906."

And the next question: "Can you give us the whole year 1905" instead of "1906."

Page 440: "These records being made up from daily reports," instead of "by daily reports."

Page 450: "We hold no stock" instead of "we hold that stock."

Page 453: "I know that the New Amsterdam Gas Company holds the stock of other companies" and "the" is out.

Page 457: "Does that include your investment in Government bonds" instead of "books."

ROBERT A. CARTER—Cross-examination continued by Mr. BURR:

Q. Mr. Carter, have you the exhibit introduced yesterday showing the sales of gas year by year?

A. I have not, Mr. Burr, because it was sent back to the office to be brought down to a later period. I can have it later in the day or bring it in the morning.

Mr. MATHEWSON: You have a copy of it up to 1904, inclusive?

The WITNESS: I have a carbon copy of what was put in, up to 1904.

469 Q. Well, will you let me have that?

A. Yes (producing paper).

Q. I notice in this exhibit containing the sales during each year from November 11, 1884, to December 31st, 1904, and average price received per thousand cubic feet sold, that in the year 1884, November 11th to December 31st, the number of cubic feet is given at 559,957,000, and the rate per thousand sold 1.6854. Will you tell us by what process you arrived at that rate per thousand cubic feet sold?

A. By taking the gross amount received from the sales of gas, the quantity sold, and dividing one by the other and getting the average price received.

Q. And is that the formula that you adopted with all the years subsequently?

A. Yes, sir.

Q. And with regard to the dividends which you testified yesterday regarding and a statement of which was introduced in evidence marked "Complainant's Exhibit 83," I notice that for the year 1885 the rate is given at 7 per cent. Where did you ascertain that rate?

A. From the books of the company.

Q. What books?

A. The general ledger would show the amount of the dividend paid and would also show the amount of capital stock outstanding and, too, would indicate the rate; of course I might say that the rate would be a matter of record in the Transfer Department, Stock Transfer Department, where the amount of dividend due each shareholder is calculated; and the dividend lists would furnish similar evidence of the amount of dividend paid.

Q. You have a Stock Transfer Department?

A. Yes, sir.

Q. And you think you testified yesterday that the average

470 dividend was something about 6½ per cent., was it?

A. 6½ per cent. from the period November 11, 1884, to October 31, 1905.

Q. This statement Exhibit 83 includes 1885 to 1906, six months, to June 30. Was it upon this statement that the average was based?

A. No, it was simply brought down to June 30 as a matter of record. An average has not been calculated since October 31, 1905.

Mr. MATHEWSON: The average will be slightly reduced?

The WITNESS: The average will be slightly reduced because of the lower rate of dividend in 1906 to date.

Q. I call your attention to the year 1886, the rate given as three per cent.; the previous year being seven per cent., in 1885. Will you

state whether any reason to your knowledge existed in that year for that falling off?

A. Yes, sir.

Q. What was it?

A. The price of gas was reduced in that year as the other table that you have will indicate.

Q. That was reduced as the result of a legislative inquiry, was it not?

A. It was reduced by Act of Legislature.

Mr. MATHEWSON: Just a moment, Mr. Carter. Do you know whether that is so or not, that it was reduced by Act of Legislature? Was it not voluntarily reduced by the act of the company itself? Just think a moment.

The WITNESS: My impression is that it was reduced by the Act of Legislature.

Mr. MATHEWSON: Will you assure yourself on that point, for I think you are mistaken, if it is a matter of any importance.

The WITNESS: Yes.

471 Mr. MATHEWSON: It was reduced from $2.25 to $1.75 by the company voluntarily after the consolidation?

The WITNESS: That is the case but this was a reduction from that price to $1.25 per thousand cubic feet.

Mr. MATHEWSON: In 1886?

The WITNESS: In 1886.

Mr. MATHEWSON: Look that up, to be sure.

The WITNESS: I will do so.

Q. And in 1894 I notice the rate is given as eight per cent. Can you state any fact to your knowledge which was the cause of the increase to that rate from the former rate of four per cent., and three per cent.?

A. None other than that the earnings of the company warranted such a dividend.

Q. Well, I presume that answer applies to all these rates that are given for each year, that the earnings of the company warranted the dividend?

A. I am only making that answer with respect to that particular year.

Q. In 1898 I see that the rate is still 8 per cent. as it was in 1894, 1895, 1896 and 1897; and in 1899 I see it drops off to 5½ per cent. Can you give any reason for that reduction in the rate?

A. My recollection is that in 1899 there was some cutting of rates between the companies, and gas was sold at so low a figure that an 8 per cent. dividend was not a possibility.

Q. There was a cutting in the rate between what companies?

—. All the New York companies.

Q. In 1899 what companies existed in New York outside of the Consolidated Gas Company?

472 A. All the companies that exist now outside of the Consolidated Gas Company existed then.

Q. You mean then that at that time the Consolidated Gas Com-

pany did not own stock in the New Amsterdam, the Standard and Mutual Gas Light Companies?

A. I can say positively as to the New Amsterdam and Standard Companies. I will not be sure as to the Mutual at that time.

Q. Well, do you know whether the antagonism or competition which existed between the companies you speak of ended during the year 1900?

A. That is my recollection.

Q. And then the dividend rate went up to 6 per cent. in that year as appears by this statement?

A. Yes, sir.

Q. And the following year it was 8 per cent.?

A. Yes, sir.

Q. Was that due, should you say, to the lack of competition, or to the control that was by that time obtained in the Standard, the New Amsterdam and Mutual Gas Light Companies by the Consolidated Gas Company in acquiring stock in the three companies I have named?

A. I could not say positively, but I should think those facts may have contributed.

Q. And in 1904 the rate is given at 8½ per cent. Was there any special reason for the increase in the rate in that year, to your knowledge?

A. Not that I am aware of.

Q. How did you arrive at the average dividends for the years from 1885 to 1905, as you testified yesterday?

A. By adding them up and dividing them by the number of years.

Q. No other process?

A. No, sir.

Q. Now what relation has the dividend, Mr. Carter, to the sale of the commodity dealt in by your company, gas?

A. I am not aware that there is any relation between the two.

Q. Then the dividend on the stock of the company is not
473 affected by the business that the company does in gas?

A. Presumably.

Q. Presumably not?

A. It is.

Q. What is the fact?

A. Well, as I do not control the payment of dividends, I do not feel that I can very well venture an opinion on the subject, Mr. Burr.

Q. Well, are not dividends commonly supposed to be declared out of the earnings of a company?

A. They are. Dividends may be declared this year, however, upon earnings of a preceding year remaining undistributed.

Mr. MATHEWSON: That is, out of surplus.

The WITNESS: Out of surplus.

Q. What was the fact with regard to your company as stated in this Exhibit 83; were these dividends out of the surplus, or were they out of the earnings, current earnings?

A. Out of both I should say.

Q. Now could you tell us with regard to 1901, for instance,

whether that was for current earnings, or past earnings or surplus earnings?

A. Both.

Q. You are quite clear about that?

A. Perfectly clear.

Q. Does that apply to each year since 1885 to 1906, as stated on this Exhibit 83?

A. I should say that in every year that a dividend was declared there was a surplus that warranted the payment of such a dividend; that in each particular year the earnings exceeded the dividend, I could not testify.

Q. What are the earnings derived from?

A. Principally from the sales of gas and from the sale of residual products.

Q. Is there any other business that the Consolidated Gas Company engages in other than the sale of gas and residual products?

474 A. The company derives some revenue from the renting of gas appliances to its consumers.

Q. Do you mean by that meters?

A. No, sir.

Q. And stoves?

A. Stoves only.

Q. Is that stove business the subject of a separate and distinct department?

A. It is, sir. We have a department that is known as the Fuel and Appliance Department, the Fuel Appliance Department.

Q. It is not a subsidiary company, it is simply a separate department of the Consolidated Gas Company?

A. That is the case, yes, sir.

Q. By whom is that department managed?

A. It is under the management of Mr. William J. Clark.

Q. So you are quite clear that the number of cubic feet, 6,731,325,000 sold during the year 1894 has no relation to the dividend declared that year of 8 per cent.?

Mr. MATHEWSON: He did not say he was quite clear. He said he could not say, as he did not have the making of the dividends. Will you let him see the exhibits? There might be possibly something in those that would refresh his recollection. I don't know.

The WITNESS: I would like to have that question read and the previous question, because I don't know whether I gave the answer that I intended to.

(Previous questions and answers read by the stenographer.)

Q. That is all you know about it; because you do not control the dividends, you cannot give any better answer than you did previously?

A. No, sir. Well, what was the question, Mr. Burr?

Q. (Question repeated as follows: So you are quite clear that the number of cubic feet, 6,731,325,000 sold during the year

475 1894 has no relation to the dividend declared that year of 8 per cent.?)

A. The dividends paid that year were paid out of the surplus earnings for that year, and if they were not adequate for the dividend, out of the surplus for preceding years accumulated up to that time.

Mr. MATHEWSON: You do not remember now whether they were sufficient or not?

The WITNESS: No, I don't know whether the earnings and the dividend were on a parity that year or which exceeded which.

Q. How could we ascertain that fact, from what source?

A. From the general books.

Q. What general books?

A. Well, there is only one set of general books, Mr. Burr, our general ledger.

Q. I have not suggested that you have any other set, but I will ask you now, have you got a confidential set of books?

A. We have not.

Q. You have only one set of books?

A. One set of books.

Q. Now, the dividend rate of 1886, 3%, you say was caused because of the reduction in the rate for gas?

A. There was a reduction in the rate in 1886.

Q. Do you remember, Mr. Carter, that at that time the same claim was made that is made now that the reduced rate was a confiscatory rate, that the company could not manufacture gas and sell it at that price without confiscation?

Mr. MATHEWSON: I don't think that inquiry is very material at the present time, but still I do not think I shall object to it.

A. I am not able to answer the question. I have no knowledge.

Q. Now, Mr. Bradley testified here with regard to repairs, 476 replacements and other expenses which were divided up among the various plants for a period extending also from 1884 to date. Did you furnish him or did your department furnish him with the information upon which the totals which he testified to were based?

A. I did, sir.

Mr. MATHEWSON: I think Mr. Bradley testified that was up to October 31st, 1905. I think you are in error as to your dates.

Mr. BURR: Well, I will accept that——

Mr. MATHEWSON: Is that correct, Mr. Carter?

The WITNESS: I have a memorandum about it. My understanding is that it ran to October 31st, 1905.

Mr. MATHEWSON: That is your recollection?

The WITNESS: That is my recollection.

Q. The totals which you testified to showing the total expended each year for repairs and replacements and new construction were furnished by your department?

A. Yes, sir.

Q. That you are quite clear on?

A. Yes, sir.

Q. Did you make up these totals from the books yourself, or did you direct some one of your subordinates to do that?

A. It was done under my supervision by my subordinates.

Q. Did you check them?

A. Yes, I checked the figures over.

Q. You had examined the books and found out the totals were correct?

A. I did not, I could not have told you the totals were correct by examining the books. I did not check off all the items, no; I assumed they were correctly taken off and I was more sure of it because the amounts shown by stations aggregated agreed with other statements that I had made up previously.

477 Q. Who was it that you designated to take these figures from the books?

A. The chief accountant.

Q. Do you know if he deputized someone to do the actual work?

A. I think he probably used two or three clerks.

Q. So then these figures were handed by these two or three clerks to the chief accountant and by him handed to you and by you handed to Mr. Bradley?

A. That is the case.

Q. Does that condition of affairs apply also to the statement made here by Mr. Simpson, regarding the mains, the cost of construction and maintenance and repair of mains from 1884 to October 31, 1905?

Mr. MATHEWSON: Mr. Simpson did not make any statement as to the cost of repairs and replacements of mains; I did not ask him that because he said he had not the information directly. Mr. Bradley was the only one who testified to that.

Q. Did you furnish Simpson with any information with regard to the cost of maintenance and repair of mains?

A. I furnished him such a statement.

Q. Mr. Simpson also testified here as to the average cost of construction as to the different sizes of mains for a period extending from 1884 to October 31, 1905, based upon the prices paid for labor and the other elements entering into the cost of construction. Did you furnish him with these various items of labor and the other elements of cost which the company had expended during the period in question, from 1884 to October 31, 1905?

A. I think he may have got some data from the accounting department, I do not recall just what; as it was an estimate I presume he used largely figures available in his own department and in his own records.

478 Q. Well whatever records or information he got from your department were prepared for him in the same manner as you have testified the information was prepared for the Engineer Bradley?

A. Any information he got from the accounting department was practically prepared in that way, yes, sir.

Q. Do the general books of the company show the income from the sale of residual products, as well as from the sale of gas?

A. Yes, sir.

Q. At the close of the fiscal year are inventories taken of all sup-

plies and material on hand, of gas, coke, and all other manufactured products?

A. An inventory is taken of all material and supplies other than coal and coke and oil and material of that character.

Q. Why are they excepted?

A. It is a difficult matter to inventory a coal pile with a good many thousand tons of coal in it.

Q. But you do keep an exact record of the coal used?

A. Precisely. We know how much is there from our records of the quantities received and the quantities used, the balance on hand as shown by our records is the quantity in stock, and any variation would only be indicated when that stock would run so low that it would become very apparent.

Q. But you could readily find out if you were making up an inventory at the end of each fiscal year how much coal you had on hand by checking up the amount received and deducting from that the amount used?

A. That is done every month, sir.

Q. So at the end of the year you would be, without much difficulty, able to say how much coal was on hand unused?

A. We have such records, not only at the end of the year, but at the end of every month of the year.

Q. These records are contained in your general books?

A. Yes, sir.

479 Q. Does that apply also to oil?

A. Yes, sir.

Q. Now I suppose there is no one connected with the company who is more familiar than you are with the affairs of the company, particularly the financial affairs of the company, is that not true?

A. I would not like to make such a statement.

Q. Would you say you are as familiar as any other officer of the company with regard to the financial affairs of the company?

A. Well, I should like you to be a little more specific, if you can, in what particular affairs you are referring to.

Q. Well, there is a manufacturing department in your company and there is a financial department, are there not?

A. I should rather call it a commercial department; it attends to the billing to the consumer and receiving money, keeping general accounts and that sort of thing.

Q. For instance that department has control of all the money that is expended for improvements and purchases, and land and investments in Astoria and the acquirement of stock in other companies?

A. Those matters are in charge of the general officers of the company.

Q. And when they assume the shape that their action resolves itself either into money to be paid out or to be received, who then takes charge of the matter?

A. On a properly accredited voucher a check would be drawn by the cashier and signed by the treasurer and countersigned by one of the other officers.

Q. Would that be in your department?

A. Well not particularly in my department. It would be an official transaction of the company and might be carried out in my absence.

Q. Where would the record of that transaction be found?

A. The record of the payment would be found in the check book and in the cash book. The voucher itself would be filed as a
480 voucher for that payment, whatever it might be; that would be filed in the accounting department.

By Mr. MATHEWSON:

Q. And if it resolved itself into a record would not those records generally be under your supervision?

A. The books ultimately would record the entire transaction, whatever it might be.

By Mr. BURR:

Q. I understood you to say yesterday you had entire control of all the books of the company?

A. I have, yes, sir.

Q. And inasmuch as these transactions that we are now speaking of are entered in the books, therefore the books that you have control of must contain a record of those transactions?

A. Every transaction of the company is recorded in the books under my control, yes, sir.

Q. And in the books under your control are contained records of all the investments of the Consolidated Gas Company in the stocks of other companies and in the stocks of any other character?

A. Yes, sir.

Q. I mean the stocks of other gas companies, or the stocks of any other companies as distinguished from gas companies?

A. Yes, sir.

Q. What year was it that the Consolidated purchased the stock in the Edison Light Company?

A. 1900. I presume you refer to the New York Gas, Electric Light, Heat & Power Company?

Q. That is the exact corporate name, yes. How much stock of that did the company acquire?

A. At that time?

Q. At that time.

A. $36,000,000 in capital stock.

Q. And what was paid for that stock?

A. Debentures of the Consolidated Company were ex-
481 changed for that stock and ultimately retired with capital stock of the Consolidated Company at $232 per share; that took place in April, 1900, the issuing of that stock being authorized by the shareholders in March, 1900. The certificate of that increase was presented yesterday.

Q. That was the second increase in stock, was it?

A. That was the first increase in stock from the $39,078,000 to the $54,595,200.

Q. And that increase of stock was used for the purchase of that stock in the Electric Lighting Company?

A. More directly for the retiring of the debentures that were given in exchange for that stock.

Q. That is $15,517,200 of stock was issued to retire $36,000,000 of 4 per cent. debentures?

A. Yes, sir.

Q. And who held those 4 per cent. debentures?

A. The stockholders of the New York Gas and Electric Light, Heat & Power Company.

Q. More than one stockholder?

A. Oh, yes.

Q. How many?

A. I don't know.

Q. More than five?

A. Yes, sir.

Q. Ten?

A. I couldn't tell you.

Q. Would your books show?

A. No books would show—the debentures themselves might—I don't know whether debentures were issued to anybody else—I am not prepared to say.

Q. Well, could you ascertain definitely with regard to that important point?

Mr. MATHEWSON: I suggest that the fact is not of importance. I do not see really that it is relevant at all whether there were five or ten or fifty stockholders; they got the property for a certain issue of consolidated stock, it is not worth any more or any less if owned by five or by twenty people.

Mr. BURR: It would be important if the stock of the company was being manipulated for private gain.

482 Mr. MATHEWSON: Oh, no, I don't think it would be. Secondly, the investment in the stock of that company, while shown to complete the record of capitalization of the Consolidated Company for general information, is not an asset upon which we claim the right to earn from the consumers of gas a dividend.

Q. That is all the information you can give in regard to that transaction?

A. In regard to that transaction, yes, sir.

Q. Can you find out more definitely about it?

A. I can endeavor to do so.

Q. Can you prepare for us a copy of the trial balance of the general ledger for each one of the months of 1905? Can you prepare and furnish that if Mr. Mathewson will allow it?

A. Yes, sir.

Q. I do not mean a condensed balance sheet, but one showing the balance of each account on the ledger?

A. I understand.

Mr. MATHEWSON: What kind of accounts do you mean, Mr. Burr? Consumers' accounts?

Mr. BURR: No.

Mr. MATHEWSON: Well, I don't think I quite understand you.

Q. On the general ledger.
A. From the general ledger, all right, sir.

Mr. MATHEWSON: I do not understand yet exactly what accounts the general ledger shows, I know some it contains, but whether I know all I do not know.

Q. Will you name all the electric light companies controlled by the Consolidated Gas Company?
A. I can name the electric light companies, some of whose capital stock is held by the Consolidated Gas Company.
483 Q. Well, I will be satisfied with that for the present. Please do so?
A. We hold capital stock in the New York Edison Company, United Electric Light & Power Company, and the Westchester Lighting Company, which is both a gas and electric company.
Q. How much stock does your company own in the New York Edison Company?
A. From memory I would not like to testify, and I might explain that at your request a statement is being made up showing the shares of stock owned by the Consolidated Company in all the gas and electric companies, which of course would cover that point.
Q. That has not yet been furnished?
A. No, sir; it is in preparation.

Mr. MATHEWSON: It is being made to-day.

Q. You have grown up, as I understand you to testify, in the gas business since you were a boy?
A. Yes, sir.
Q. You are entirely familiar with the gas conditions that prevail and have prevailed for twenty years past in the City of New York?
A. Passably so, I think.
Q. You know the name of every company operating in the Borough of Manhattan as a gas or electric light company?
A. I think I do; yes, sir.
Q. And you know the name of every company operating as a gas or electric light company in the Borough of the Bronx?
A. Yes, sir.
Q. Isn't it a fact that every company, both in the Borough of the Bronx and in the Borough of Manhattan, is controlled by the Consolidated Gas Company, every gas and electric light company?
A. I have named electric light companies in which the Consolidated Gas Company holds stock. I know of at least one com-
484 pany operating in the Borough of Manhattan or the Bronx—in fact I know several companies that the Consolidated Company does not own a share of.
Q. Will you name the companies operating as gas or electric light companies in the Boroughs of Manhattan and the Bronx in which the Consolidated Gas Company does not own a share of stock?
A. Directly?
Q. Directly or indirectly.
A. The Borough of the Bronx Gas and Electric Company.
Q. That is the Bronx Gas and Electric Light Company?

A. The Bronx Gas and Electric Light Company. We do not own any stock of the Central or Northern Union Companies, although the stock of those companies is owned directly or indirectly by the New Amsterdam Company, most of whose stock is owned by the Consolidated Company.

Q. That is what I mean, Mr. Carter, and that is what I am trying to get fully informed about. Is it not a fact—you can state the fact just as it is—is it not the fact that directly or indirectly the Consolidated Gas Company controls every company operating as a gas or electric light company in the Boroughs of Manhattan and the Bronx, with the sole and single exception of the Bronx Gas and Electric Light Company?

A. I cannot say as to the word "control." We own stock in those companies and that is as far as I can testify.

Q. Then I will ask you is it not a fact that the Consolidated Gas Company owns a majority of the stock of every gas and electric light company operating in the boroughs of Manhattan and the Bronx, with the single exception of the Bronx Gas and Electric Light Company?

A. Directly or indirectly I think that is the case.

Q. Now, do you know what the capitalization of each of
485 the companies merged into the Consolidated Gas Company was at the time of the consolidation in 1884?

A. The share capital?

Q. Yes, sir.

A. No, from memory I could not say what it was.

Q. I might refresh your recollection. The Manhattan Gas Light Company, $1,000,000.00, New York Gas Company——

Mr. MATHEWSON: Just a moment; I think perhaps it would be more in order, if I may suggest, to submit anything that you think might refresh the witness's recollection to him instead of reading it and asking him if from memory he can state.

Q. You have testified that you cannot state the capitalization of each of the companies merged into the Consolidated, from memory?

A. I have so testified.

Q. I hand you a statement and ask you if that statement correctly sets forth the amount of the capitalization of each of such companies, together with the aggregate of the same?

Mr. MATHEWSON: When you say the capitalization do you refer to the capital stock or to the capital in stock, bonds and other obligations, in the aggregate?

The WITNESS: I have never checked these figures, Mr. Burr, with records that I know to be correct, and I prefer not to testify that these figures are correct without making such a comparison. In other words, I would rather not do it from memory, as to the correctness of the figures.

Q. You would not be understood as contradicting the statements there appearing that the total stock capitalization was $17,000,000.00?

486 Mr. MATHEWSON: I object to that. There is really no testimony to that effect. He says he does not know and can-

not state, and those are not in evidence at all. Nobody has testified to them.

The MASTER: I do not know what they are. I presume they are the defendants' motion papers.

Mr. BURR: I want to show the exact condition of the companies as they were consolidated.

The MASTER: And if they are the defendants' motion papers, of course the papers in this suit are before me under this rule anyway. I assume that he is simply trying to get some basis for further information. I will allow him to testify as far as he can. He says that they do not refresh his recollection.

Q. Will you have prepared a list showing the issues of stock of the six constituent companies merged into the Consolidated Gas Company and the indebtedness of each company assumed by the Consolidated Gas Company?

Mr. MATHEWSON: I object to that request, and the proposed testimony, on the ground that it is immaterial and irrelevant. The act under which the Consolidated Gas Company was formed, the general Act before your Honor, provides that the Consolidated Gas Company may have a capital equal to the aggregate value of the property, franchises and rights of the constituent companies. What amount of capital stock the constituent companies had outstanding, or even what their property originally cost in 1823, under the terms of the Act of 1884, is not material, because the Act authorizes the consolidation at the then value of the property, rights and franchises,
487 so that I cannot see how it would aid this inquiry, or affect the capitalization of 1884, to produce this information.

The MASTER: Did you not ask some questions of this witness about the market value of the stock of those constituent companies?

Mr. MATHEWSON: Yes. That is to say, the stock of $39,078,000, which was issued in 1884, which was authorized to be issued for those companies, although only $37,075,000 was issued sooner or later, was equal to the aggregate market value, as it was said, of the stocks and securities of the six constituent companies.

The MASTER: It seems to me it is proper under those circumstances, on cross-examination, for them to go into the question of what the actual outstanding stock was, as long as you have brought up the question of market value.

Mr. MATHEWSON: It may be; quite likely. For instance, land in 1823 was much less valuable than its cost sixty or seventy years later, when the consolidation of 1884 took place. You rule that the witness may produce the papers?

The MASTER: I am not disposed to rule that he is to prepare statements and tabulations unless you want it, but I assume that where it is going to tend to save trouble and the producing of books——

Mr. MATHEWSON: If you hold that it is material and proper, the witness will prepare such a statement.

The MASTER: Yes, I overrule the objection.

Exception taken by Mr. Mathewson.

Mr. BURR: I might simply state; here are the figures as found by the Joint Committee of Senate and Assembly.

488 Mr. MATHEWSON: I would prefer to have the witness check them over so that he may be sure. That checking was not done by him, and it was not checked by them directly, but taken from another document. I have no objection to complying with your request under the ruling of the Master.

Mr. BURR: I want to examine him along that line.

Mr. MATHEWSON: He will be on the stand, or accessible for further cross-examination.

Mr. PAGE: I think these facts already appear from the testimony already offered by you, showing the incorporation of the various companies and the increases of capital stock.

Mr. MATHEWSON: No; not those. Those are the constituent companies. There is nothing in there about that at all.

Mr. PAGE: I know.

Q. If the total stock issues of the six companies merged into the Consolidated Company was $17,000,000, and the total indebtedness of such companies assumed by the Consolidated Gas Company was $3,415,150.76, making altogether $20,415,150.76, can you explain to the Court why thirty-seven millions of dollars was issued in payment for the property of those companies merged into the Consolidated Gas Company?

Mr. MATHEWSON: I object to that question as hypothetical, and furthermore as dealing with a subject the facts in regard to which have already been stated. The way that that $37,775,000 was made up has already been testified to—appraisal of the tangible property, about twenty-nine millions, plus franchises, $7,781,000, making $37,775,000. It seems to me that to ask the witness how it

489 was done is asking for a conclusion upon a hypothetical question, which cannot result in anything of value.

Mr. BURR: Of course it is very pleasant to have Mr. Mathewson recite these facts and figures which he has at his fingers' ends, but that is not the testimony that I am trying to bring out. I am asking the witness whether he knows, and if he does not know he can simply say he does not know, and if he does know, we are entitled to what he has to say in regard to any particular given subject which is pertinent here. I am simply asking him if he knows the reason why, if the total stock issues, including the indebtedness to be assumed by the Consolidated Gas Company, aggregated $20,415,150.76, there was issued for the same over $37,000,000 of stock of the Consolidated Gas Company.

Mr. MATHEWSON: But the Act provided that the consolidation should take place at the then value of property, franchises and rights of the constituent companies.

The MASTER: I will allow the question.

Exception taken by Mr. Mathewson.

A. I should say that the capital stock and other obligations of those companies outstanding at that time did not represent the then actual value of the properties of those companies.

Q. Well; that is an answer. Now, do you know how old each of those companies was at the time of the consolidation in 1884? Can you tell me when the Manhattan Gas Light Company was organized?

A. No, sir, I could not say from memory. I know that the date is from 1823 on. That would be the oldest company, but I have not in mind the dates of incorporation of the other companies.

Mr. MATHEWSON: The certificates of incorporation of these
490 companies are in evidence here and show the dates.

Q. They were organized from 1823 and had been in existence a good many years before the consolidation in 1884, hadn't they?

A. Yes.

Q. What do you understand in the gas business is meant by appreciation?

A. It is not a term that we use very frequently in the gas business. There is appreciation in property constantly going on, I presume, real estate particularly. We know that it is going on, but we do not take any notice of it in our accounts. We do not use it in the sense of endeavoring to augment our values, the value of our property, by taking account of it.

Q. Is not that an element that enters into the business, the appreciation of its property, the gas company's property? Have you no separate entry in your books regarding appreciation of property?

A. Never.

Q. I have heard a great deal regarding depreciation. What is meant by depreciation, as applied to the manufacture of gas in this city under prevailing conditions?

A. It means actual renewal and replacement of property, destructible property. In the case of plant, depreciation would mean the renewal of parts of apparatus dismantled for some reason, either because of wear and tear or supersession. In the case of street mains it would mean the loss incident to the replacing of small mains by mains of larger size. The same would apply to services. In the case of meters, the condemning of a meter leads to the replacing of it with a new meter. The cost of the old one would appear as depreciation. That is what we understand by the term depreciation in the gas business. It might more properly be expressed as renewal and replacement.

Q. Well, would you say that six companies who are cap-
491 italized and represented an investment of $20,415,450.76, had appreciated or depreciated if for their purchase over $37,000,000 was paid.

Mr. MATHEWSON: I object to that question as hypothetical and not stating the facts in the hypothesis.

The MASTER: I will allow it.

Exception taken by Mr. Mathewson.

A. I should say that decidedly the value had appreciated.

Q. What do you understand by the franchises that you testified regarding yesterday, as being valued at $7,781,000?

Mr. MATHEWSON: I object to that as incompetent and immaterial.

The franchises have not yet been offered in evidence. They will be hereafter, the grants.

Mr. BURR: This witness was examined with regard to them.

The MASTER: I will allow it.

Exception taken by Mr. Mathewson.

A. My understanding is that that was the value placed on the franchises at that time; by what process of reasoning I do not know.

Q. As to the alleged franchises themselves, have you any knowledge what they consisted of? What is meant by franchises of those companies, for which that large amount of money was allowed or paid?

The same objection, ruling and exception.

A. It is a subject I am not familiar with and I would be loath to testify on it as to technically the franchises that were comprised in that valuation.

Q. Then you have no knowledge as to their value, yourself?

A. No, I have not.

492 Q. And you do not want to be understood here as testifying in any way as to the value of those franchises?

A. Not specifically.

Q. I have asked you; in any way.

A. I might have the opinion that in a general way their value was much greater than that figure.

Q. But, to have an idea as to their value, and their correct value, you must have some idea as to what is meant by franchises—what the franchises embrace?

A. The fact that the company was doing business at that time would itself indicate that they had some rights that possessed some value.

Mr. BURR: I submit that that is not responsive to my question. I am asking him, and I am seeking to ascertain from him, what is meant by franchises upon which he has some idea as to their value.

The MASTER: Well, that is responsive, as far as it goes.

Q. That is all you can say on that subject, is it?

A. I have no doubt that the fact that the Consolidated Gas Company had established business relations with the public, had succeeded in making gas installations in practically every building in New York, and had built up a certain amount of good will, was understood at that time to have a value.

Q. The Consolidated had not done that in 1884, had it?

A. The companies that were consolidated had done so.

Q. So that you regard the franchises as embracing good will?

A. I think so, yes.

Q. Did you have anything to do with the placing of the valuation on the franchises of these companies?

A. No, sir.

Q. I understood you to say that you had not anything to do with regard to the appraisals of the property of the company?

A. Nothing.

493 Q. And that the appraisals were done by a man named Rowland, is that right?

A. A great deal of it, yes.

Q. Can you name any other man who assisted in the appraisal of the property of those companies.

A. No, I cannot.

Q. Who was Mr. Rowland?

A. Mr. Rowland was a constructor of gas plants of world-wide reputation and very large experience, a man who enjoyed a high reputation commercially.

Q. Did you know him?

A. I had met him.

Q. How long had you known him?

A. At the time of the consolidation?

Q. Yes?

A. Perhaps two or three years.

Q. Where was he employed before 1884?

A. He was never employed by the company except for the purpose of those appraisals.

Q. And he was employed by the Consolidated Gas Company for the purpose of appraisals?

A. I think not; I think he was employed by the companies subsequently consolidated, for the purpose of making those appraisals.

Q. He was employed by the companies who were being purchased by the Consolidated Gas Company, for the purpose of making appraisals?

A. There was no purchase that I ever heard of, by the Consolidated Gas Company, of other companies.

Q. He was employed by the companies that were subsequently merged into the Consolidated Gas Company; is that right?

A. He was employed by the companies that subsequently consolidated and formed the Consolidated Gas Company.

Q. He was, to your knowledge, employed by the companies that were subsequently consolidated and formed the Consolidated Gas Company, is that right?

A. Yes, that is the case.

Q. Did you know William Farmer at that time?

A. No, sir.

494 Q. Wasn't he connected with the Consolidated Gas Company at that time?

A. Not that I am aware of.

Q. Who was secretary before you of the Consolidated Gas Company?

A. J. A. Bennett.

Q. Who was secretary before him?

A. L. B. Gawtry.

Q. Was there not a secretary named Zollikoffer, or some such name?

A. There was.

Q. What year was he secretary?

A. He held the position prior to L. B. Gawtry's incumbency.

Q. Is it the duty of the secretary to sign the tax reports?

A. They usually have been signed by the secretary.

Q. What position did you occupy when Mr. Zollikoffer was secretary?

A. I was controller at that time, part of the time, latterly; before that I was General Accountant.

Q. What year was that?

A. I will not be sure.

Q. Was it 1899?

A. I think in 1899 Mr. Zollikoffer was secretary, and I think I was controller.

Q. Do you recall that there was some discrepancy between the tax report and the other valuation of the company that year?

A. In 1899?

Q. Yes.

A. I do not know just exactly what you mean.

Q. I will not press that. Do you recall any episode in regard to a difference of a few hundred thousand dollars between the report made to the Tax Commissioners and the figures appearing upon the books of the company?

A. In 1899?

Q. Yes.

A. What particular property, Mr. Burr?

Q. Evidently you do not remember about it;—taxable property.

A. Well, I recall the 1899 report from having seen it, although I had nothing, to the best of my recollection, to do with making it up. I think it was made up under Mr. Zollikoffer's supervision by
495 the then general bookkeeper. My recollection is that with respect to the value of some of our property we made no report whatever; the report was blank, and so submitted to the State Board, with respect to the value of some of our property; it may be that that is what you have reference to.

Mr. MATHEWSON: He asked you if you remembered any episode in that connection. Do you remember any episode?

A. (Continuing:) No, I do not; the report was accepted by the State Board and the assessment levied against the company.

Q. And you remember that the company appealed from that assessment?

A. I do, very well.

Q. You stated yesterday, if I am not mistaken, and I think Mr. Mathewson also stated, there was no such company as the East River Gas Company of Long Island City?

A. Oh, no.

Mr. MATHEWSON: No, I did not say so. I said there was no company known as the East River Gas Company, as distinguished from the East River Gas Company of Long Island City.

Mr. BURR: I thought you stated that there were no such corporations.

Mr. MATHEWSON: Oh, no. There are. I have heard of them many, many times, and I have presented arguments in favor of the

East River Gas Company of Long Island City. It is impossible that I should have made such a statement. You used the term "East River Gas Company," and "East River Gas Company of Long Island City." I thought perhaps you thought there were two companies.

Mr. PAGE: On page 450 of the record I asked the question:

"Q. Does it own stock in that company indirectly? A. I
496 should say not. I don't think it would own it unless it owned every share of the stock of the company. We hold no stock of the East River Company.

"Q. Does it hold any stock in the company, and if so, how much to your knowledge in the East River Gas Company of Long Island City? A. No, it does not.

"Q. And in the East River Gas Company? A. No, it does not.

"Mr. MATHEWSON: I do not think there are any such corporations. I may be wrong.

"The WITNESS: I have never heard of them."

Mr. MATHEWSON: That should be "any such corporation," known as the East River Gas Company. I never heard of that. That is a mistake of the stenographer. There is an "s" in there, and the witness says he never heard of it, as distinguished from East River Gas Company of Long Island City. There is an East River Gas Company of Long Island City, and there was a New York and East River Gas Company, which was one of the three companies which consolidated and formed the present New Amsterdam Gas Company. Those are the only two of anything like that name that I know of or ever did know.

Q. Then I will ask the witness, so that we may have it straight on the record. Do you know that there is such a company known as the East River Gas Company of Long Island City?

A. Yes.

Q. Does the Consolidated Gas Company own stock in that company and if so how much?

A. No, sir.

Q. Does it indirectly own stock in that company?

A. The stock of the East River Gas Company of Long
497 Island City is owned by the New Amsterdam Gas Company.

Q. And you own the controlling shares of stock of the New Amsterdam Gas Company?

A. We own a majority of the stock of the New Amsterdam.

Q. And is that the company which has the tunnel under the East River?

A. Yes.

Q. The East River Gas Company of Long Island City is the company which has a tunnel, a small tunnel now in existence under the East River; is that right?

A. Yes.

Q. At the time of the purchase of the Astoria property who were the Board of Directors and the officers of the Consolidated Gas Company?

A. With one or two exceptions I think the organization was the same as it is to-day.

Q. Well, will you give me their names?

Mr. MATHEWSON: I object to it as immaterial and irrelevant.
The MASTER: I will allow it.
Exception taken by Mr. Mathewson.

A. From memory I would not like to say; it was back in 1898 or 1899, eight or nine years ago, and I should want to consult our records before I state positively who the officers and directors were at that time.

Q. You have stated that with one or two exceptions, they were the same as the present Board of Directors and officers?

A. That is the case.

Q. What are the names of the present officers and Board of Directors of the Consolidated Gas Company?

The same objection, ruling and exception.

A. The Board of Directors comprise——

498 The MASTER: Is not that all in one of these exhibits?
Mr. BURR: I thought he could rattle it off in a minute, I think it is.
Mr. MATHEWSON: Is it not in your 1905 tax report, Senator?
The MASTER: I think it is either in one of the exhibits or one of the answering affidavits read on the injunction motion.

A. The trustees in the company are: Harrison E. Gawtry, Samuel Sloane, William Rockefeller, M. Taylor Pyne, George F. Baker, James Stillman, Stephen S. Palmer, F. Augustus Schermerhorn, Anthony N. Brady, Thomas F. Ryan, Frank Tilford, John W. Sterling, A. H. Elliott. The officers of the company are: Vice-Presidents, Samuel Sloane, W. R. Addicks and I. F. Gawtry. Treasurer, James A. Bennett; Assistant Treasurer, Benjamin Whitely; Secretary, R. A. Carter; Assistant Secretary, Colin C. Simpson; Auditor, F. L. Lambrecht.

Q. Is that Assistant Secretary Simpson the same Simpson who testified here with regard to mains?

A. Yes.

Q. So that in addition to having special charge of the mains and doing outdoor work continuously, as he stated, he is also assistant secretary?

A. Yes.

Q. What are his duties as assistant secretary?

A. The duties of the secretary in the absence of the secretary.

Q. What are the duties of the secretary of this company?

A. The secretary has charge of the accounts, of the stock transfer department, the stock ledger, contracts and leases, the minute books and records of the company.

Q. To what accounts are the salaries of the chief engineer and his assistant charged?

499 A. To an account called general expense. I understand you to mean his assistant at the general office? Not referring to the superintendent at the works, whose salaries would be charged

to superintendence at that station, and would appear as an item of the cost of gas manufacturing.

Q. Well, where would their salaries appear?

A. As an item in the cost of gas manufacturing, called Superintendence.

Q. Have the Standard, the New Amsterdam and the Mutual each engineers separate and apart from Mr. Bradley?

A. Yes, sir.

Q. They have their own staff of engineers?

A. Their own staff of engineers.

Q. So that we have, with regard to those companies, three complete organizations?

A. Yes, sir.

Q. And therefore triple the expense in the production of gas?

Mr. MATHEWSON: I object to that—"triple the expense in the production of gas"—as a conclusion.

Mr. BURR: If he knows, I ask him what he knows about it.

The MASTER: I will allow it.

Exception taken by Mr. Mathewson.

A. I should say not triple expense; each one of our stations has a superintendent, and there is a superintendent at the stations of each of those companies, and would have to be under any circumstances.

Q. Then those companies, as I understood you to say yesterday, each one had a complete set of officers and complete accounting departments, just the same as you have in the Consolidated Gas Company?

A. Yes.

Q. And your knowledge of the gas business would lead
500 you to say that the expense of those departments is charged up against the manufacture of gas by each of those companies?

A. To which departments do you refer?

The same objection, ruling and exception.

Q. The departments which you say are complete in the three companies that I have named, the Standard, the New Amsterdam and the Mutual, which they still keep up as separate entities, engineering department, financial department and auditing department, and full set of officers. Those are all expenses for each company, are they not?

A. Yes, decidedly.

Q. And the expense of maintenance of those departments of each company is charged up against the manufacture of gas by each company?

A. I would not say it was charged up against the manufacture of gas; I should say expense of operation.

Q. The expense of operation is charged against the manufacture of gas, is it not?

A. No, not against the manufacture of gas necessarily; it might be charged up against the cost of distributing gas.

Q. Well, it is charged up against the gas that is finally delivered to the consumer?

A. Yes, charged up against the revenues of the company, against the revenues.

Q. Have you got an inventory of the plant operated by the Consolidated Gas Company?

A. No, sir.

Q. How do you arrive at any valuation of the property of the company without having an inventory of it?

A. The accounts that the company keep indicate the amounts expended on the various plants from the time of consolidation in 1884 down to date; that is the value of course which appears in our statements, upon the balance sheet of the company.

501 Q. Are those itemized accounts?

A. Itemized accounts, yes, sir.

Q. Those itemized accounts show each piece of material or property that is purchased for each station or plant?

A. Yes.

Q. And if you wanted now to get up an inventory of that property where would you find the material for preparing such an inventory?

A. It could be taken out of the accounts by a long process. Perhaps an inventory of the physical property would be a shorter method than to attempt to dig it out of twenty odd years of itemized accounts.

Q. Well, I agree with you. Have you got such an inventory of the physical property?

A. You mean made from the physical property?

Q. From the physical property used in each plant and belonging to each plant?

A. No, there is no such inventory that I have any knowledge of.

Q. And therefore, to ascertain what property belongs to each plant you say would involve an examination, a laborious examination of a long series of accounts?

A. Either that or an inventory of the physical property.

Q. Either that or an inventory of the physical property?

A. Yes.

Q. Well, now, can you explain to the Court how Mr. Bradley is able to make up or give an estimate of the value of the property belonging to the Consolidated Gas Company in each of its plants, without such an inventory?

Mr. MATHEWSON: I object to that as incompetent and immaterial. You recall that Mr. Bradley stated that from his long experience in the business he was able to state that, that he had no inventory upon which he proceeded. I do not think this witness can answer such a question as that.

502 The MASTER: I do not see that it is material as explaining what Mr. Bradley was able to do. I think it is proper on cross-examination to ask a general question as to whether it would be possible to get at the estimated value in such a way.

Mr. BURR: I will adopt your Honor's suggestion.

Q. I will ask you to make up a valuation of the property of the

company at each of its plants, it would be necessary to have this inventory of the physical property, either as you have stated, by going through this long process of searching out the bills of the same from the books of the company for the past twenty years; is that right?

A. No, I think that a gas engineer familiar with the construction of gas plants, given a plant of certain producing and holder capacity, would be able to estimate its cost or estimate its reproduction value very closely.

Q. Without any regard to what had been expended?

A. Why, yes; it might be better than its cost, because he probably would take into consideration variations in cost of materials that the books would not show, and that might very materially affect the cost of the plant.

Q. That would be merely ascertaining the cost of reproduction. It would not be absolutely the value of the property now on hand at each plant, would it?

A. Well, the cost of reproduction would be pretty nearly the value of the plant on hand, I should think.

Q. So that in the gas business it is not necessary to make an itemized inventory, putting a particular value against each particular piece of property, but you lump it all from observation, or else dig it out of the books?

A. Well, there are different ways of doing it. That is one way of doing it.

503 Q. Well, the other way you have described——

A. I have described two ways of doing it. One way, the value arrived at from the books would be the cost, which might be its present value; it might be less than its present value, and it might be considerably less than its present value based upon reproduction new.

Q. You were to tell me about the amount of coal that was used each year. Have you been able to get that data for me?

A. I did not understand that, Mr. Burr. I did not understand that that point was settled last night.

Mr. BURR: Do I understand that counsel refuse to produce the statement that I have asked for with regard to the amount of coal consumed each year since 1884?

Mr. MATHEWSON: Yes.

Mr. BURR: And the amount of oil that has since been similarly consumed each year, in the manufacture of gas by the Consolidated Gas Company?

Mr. MATHEWSON: Yes, counsel do refuse to produce that unless it is ordered by the Master, and they submit it is wholly unnecessary and unreasonable. I am having prepared, as I stated to Mr. Burr, in great detail, a statement showing the expenditures for gas within the last convenient period, showing the amount of coal used, the price paid for the coal, and I think substantially all the details that will be required. It seems to me when that is presented, the question which Mr. Burr raised, as to the details of that period, if that is not sufficient to satisfy him, might arise, but nobody yet has raised the

question of the price of gas. We did not go into it. We have not reached it yet. But if we do, we certainly should not try to
504 cover a period from 1884 to date. What gas costs now is the material point, not what it cost in 1884 or 1890.

Mr. BURR: Your Honor will recall that both Mr. Bradley and Mr. Simpson testified in detail with regard to these very large items of repairs and replacements and construction of plants and mains from 1884 right up to the present time. Now it seems to me that if they are permitted to present a summarized statement of that kind here, that at least we are entitled to have shown us what amount of coal or oil, which would figure very largely in going into the expense of operating a gas plant and manufacturing and distributing gas, was used. We are certainly at least entitled to the same sort of information that they have themselves, from 1884——

Mr. MATHEWSON: We have not submitted a word as to the cost from 1884. Here is a balance sheet of certain items of capital on certain dates. The amount of coal and oil——

The MASTER: It is not necessary to discuss it any further. I stated last night what I would do about it. I certainly shall not make any wholesale order for the production of books covering a period of twenty years showing the cost of coal and oil. The utmost that I would do at the outset would be after you had laid a proper foundation for it, to bring down the books showing in the first place the coal and oil account possibly for a period of a year past, and starting with that we will see what that amounts to. But as I understand Mr. Mathewson this morning, he says he is having a statement made up along that line. I think we had better defer the question of what books are to be produced until you get that statement.

505 Mr. BURR: You will remember some time ago when examining Mr. Bradley upon this subject I waived any question of the production of the original contracts for the coal and oil on the understanding that we were to be furnished with either the original contracts or a statement regarding the same.

Mr. MATHEWSON: We will produce the original contracts here for your inspection in connection with this statement of the cost of gas, so you can see what our contracts call for, for coal and for oil, for that matter. And we concede your right to check in any proper manner the statement we present to see whether it is right, on the cost of gas. But I do not think you will have a particle of difficulty if you will wait until the statement comes in and let us take it up in order.

Q. I will ask you now offhand if you know what was the lowest and highest price paid for coal within the past five years?

Mr. MATHEWSON: I object to that as immaterial and irrelevant.

The MASTER: He may answer if he knows.

A. I don't know. From memory I would not undertake to give it.

Q. You don't know the highest or lowest price paid for oil, do you?

A. No, sir.

Q. Did you not testify before the Gas Commission that you did know?

A. Decidedly not. That I could tell from memory? I could find out. It is all a matter of record, Mr. Burr.

Q. Is not 4½ cents a gallon the average price that has been paid for oil to your knowledge for the past five years?

506 Mr. GANS: Unless the witness knows, I am afraid I will have to interpose an objection, because I think the question is too important. I do not want the witness to guess on this any more than Mr. Mathewson does.

The WITNESS: It would only be a guess, Mr. Burr.

Q. Well, if you don't know I don't want your guessing. That will all appear on this statement you are preparing?

A. Yes.

Mr. MATHEWSON: It will, the cost per gallon of the oil we use.

Q. Have you been allowed any rebates on the shipments of coal made to you?

Mr. MATHEWSON: I think the contracts themselves, Mr. Master, will show what they are when they are presented, and would not Mr. Burr be willing to postpone that until this statement is before us?

Mr. BURR: No, I will just ask that question in regard to rebates, if he knows.

The WITNESS: Well, what may have been the case many years ago, I don't know. I know at the present time there are no rebates on any coal that the company is purchasing.

Q. How long since they have ceased?

A. I don't know how long ago, I should say perhaps on one contract there was some allowance possibly three or four years ago, but from memory I would be reluctant to testify on the subject.

Q. Will the contracts show the rebates?

A. Any contract upon which there is any rebate, the rebate would show in the contract.

Q. Would not the rebate be the subject of a separate contract?

A. Well, the full information would be attached to the
507 contract, any information respecting any rebate.

Mr. MATHEWSON: If there were any?

The WITNESS: If there were any.

Q. And has your company received any rebates from the shipment of oil for the past five years?

A. No, sir.

Q And has there been any reduction to the company from the price charged as billed?

A. No, nothing of that kind, unless for some error in the quantity. I think in one or two instances some allowance has been made because of some shortage of delivery.

Q. You stated here yesterday that the company needed a working capital of over a million dollars. Can you explain a little more fully why it is necessary to carry such a large amount of money in cash?

A. The expenditures of the company for current expenses, con-

struction, etc., are very considerable every month, and anything less than a working capital of a million dollars would be, in my judgment, sailing too close to the wind. We are likely to be called upon at any time for perhaps a very considerable payment either for some construction in operation or something of that nature and we would have to have the cash to meet it.

Q. Is that capital that you have referred to of a million dollars used at any time in the purchase of stock or stock transactions?

A. Well no, I should say not. I had not that in mind in testifying that in my judgment that was a reasonable amount of working capital for the company to have.

Q. You claim and have stated here that the actual capital invested amounts to eighty million dollars?

A. The outstanding capital stock, share capital of the company, amounts to eighty million dollars, yes, sir.

508 Q. Sixty-seven million dollars of that is invested in stocks, is it not?

A. I should say decidedly not.

Q. How much is invested in stocks and bonds of all kinds and descriptions?

A. Of the eighty million dollars?

Q. Yes.

A. Well, there is a condensed balance sheet in evidence here, one of the exhibits, that would indicate that.

Mr. MATHEWSON: I think it is Exhibit 80. (Handing paper to witness.)

Q. How much, Mr. Carter, is invested in United States Government bonds by your company?

A. We have three million dollars of bonds, which cost us $3,087,000 and some odd. I can give you the exact amount if you wish.

Q. Did you not have eleven million dollars invested in United States Government bonds and city stock?

A. Well, I am speaking of the present time. I think at the time on October 31st, we had about that amount.

Q. October 31st, 1905, did you have $11,000,000 invested in United States bonds and New York City stock?

A. No, sir.

Q. How much did you have?

A. We had $3,087,500.

Q. October 31st last?

A. October 31st, 1905.

Q. And October 31st, 1904, did you not have $11,000,000 of the company's money invested in government bonds and New York City stock and bonds?

A. I don't recall the amount. We had quite a large amount invested at that time.

Q. Would you swear it was not $11,000,000?

A. I would not swear that it was not or that it was. Our records will show exactly what we had invested at that time and I prefer to testify from our balance sheet of that date.

509 Q. Will you bring down your balance sheet showing the amount you had invested at that date?

A. What date?
Q. October 31st, 1904?
Mr. MATHEWSON: December 31st, 1904.
Mr. BURR: Yes.
The MASTER: That will be covered by the other statement, will it not?
The WITNESS: The balance sheets of 1905 showing every year would indicate what was carried in that account.
Q. In 1904?
A. It will not in 1904.
Mr. MATHEWSON: January 1st, 1905, would be the same thing, would it not?
The WITNESS: But the January balance sheet would be as of January 31st, 1905.
Mr. MATHEWSON: Well, you can supplement it.
The WITNESS: I will put in the December 31st, 1904, balances.
Q. Is it not a fact, Mr. Carter, that the net return in the way of dividends or interest on $67,000,000 for the year 1904, invested by your company was no more than 1½%?
A. I have not any figures here from which to testify and I would not like to do so from memory.
Q. But you will incorporate that in the statement that you are to furnish?
A. Do you want the income from securities owned and the rate per cent. on the par value of securities owned, is that the question?
Q. Yes.

510 Mr. GANS: I thought what Mr. Burr asked for was the rate per cent. on the capital invested in those securities.
Mr. MATHEWSON: The rate per cent. on those securities as they are carried on the books of the Consolidated Gas Company.

The WITNESS: I want to give it to Mr. Burr, as he wants it.
Q. I may ask you—first I asked you whether $67,000,000 of the company's money was not invested in other securities?
A. You said $67,000,000 of the capital stock?
Q. Yes.
A. And I said that it was not.
Q. How much did you say was?
A. I did not say.
Q. How much is it or was it in 1904?
A. If I have the sheet I had a moment ago, I can testify.
Mr. MATHEWSON: Give the date.
The WITNESS: As of October 31st, 1905, $38,643,590.14 of the capital stock was invested in the securities of other companies, together with a premium on capital stock of $14,322,217.95; and sundry other resources, $75,326.43, or a total invested of $53,041,-134.52, which amount does not include the investment in the city stock of $3,087,500.
Q. Would the figures vary, were they any larger in 1904? Did they not amount to $67,000,000 in 1904?
A. I would say also that that does not include the capital stock, the bonds or the amounts advanced to the Astoria Light & Power

Company, which may be included in the figure which you have in mind.

Mr. MATHEWSON: Or the National Coal & Coke Company.

The WITNESS: Or the National Coal & Coke Company.

511 Q. Figure those all up and see how much they amount to?

A. The amount invested as of October 31st, 1905, in the securities of other companies, or rather the securities and obligations of other companies which includes also the city stock and the National Coal & Coke Company and the Astoria Light, Heat & Power Company investment amounted to $61,738,634.52.

The MASTER: We will suspend until 2.15.

Recess until 2.15 P. M.

After Recess.

ROBERT A. CARTER resumes the stand for further cross-examination:

Cross-examination by Mr. BURR:

Q. The dividends declared by the company have averaged something like 6½ per cent., you said?

A. Yes, sir.

Q. I call your attention to the affidavits made by Mr. McMillan and other gentlemen, contained in the printed book of affidavits and notice of motion in this case, in which it is stated that a rate should not be fixed which will necessitate a lower return than ten per cent. upon the investment in gas works in New York City, in order to sell stock of such company; do you agree with that statement?

Mr. MATHEWSON: Will you give me the names of the affiants besides Mr. McMillan to whom you refer?

Mr. BURR: Walton Clark, Emerson McMillan, Allen B.

512 Forbes, Charles S. Fairchild, Frank A. Vanderlip, Horace J. Morse and Wetmore Halsey.

A. I have no hesitancy in concurring in the opinion expressed in those affidavits.

Mr. GANS: I did not understand the question was completed.

Mr. MATHEWSON: Yes, he asked if the witness agreed with those conclusions.

Mr. GANS: I am p[illegible]n rather an embarrassing position here because I am free to say if Mr. Mathewson had put that question to the witness I should have felt compelled to object to it on the ground that it was irrelevant and immaterial and not a subject for opinion evidence, and I make the same objection to that sort of inquiry now, even though put by counsel for another defendant.

Mr. PAGE: I suppose anything that Mr. Burr goes into outside of direct-examination in this cross, that we are not bound by as representing the State.

Mr. BURR: I am asking him if he concurs in that opinion and

then will ask him upon what he bases such an opinion, in view of what he has observed himself.

The MASTER: I do not suppose the testimony on that subject is of any great value, and I suppose it is not the sort of matter which would really be covered or can be covered by expert testimony; at the same time it seemed to cut considerable figure in the case on the preliminary applications and I will allow the question. Of course you could multiply witnesses indefinitely on one side or the other on that proposition.

513 Mr. BURR: I do not wish to have that appear in that way. If the counsel for the State feel that that would be in the slightest degree injurious to their position I withdraw the question.

Mr. MATHEWSON: The question is already answered, I think. Is it not, Mr. Stenographer?

The STENOGRAPHER: Yes, sir (reading the answer).

Mr. GANS: May the answer be stricken out physically from the record?

Mr. BURR: I withdraw the question and ask that the answer be stricken out.

The MASTER: If there is no objection to it on the part of Mr. Mathewson?

Mr. MATHEWSON: I think I shall object. The witness answered the question. If he answered to the contrary I suppose it would not have been insisted that it be stricken out.

Mr. GANS: My request was made practically as soon as it could be made.

Mr. MATHEWSON: If the question had been withdrawn before the witness answered the question I should have assented, but it having been answered it does not seem quite fair, whatever the answer may be worth, to withdraw it now.

The MASTER: I will allow it to stand.

Mr. GANS: Exception.

Q. During all the years that the stock of this company has been sold from 1885 up to the present time, it has never had a 10% dividend declared, according to the exhibit which you have presented here?

A. The company has never paid 10% in any calendar year, no, sir.

Q. Notwithstanding which fact you have disposed of the
514 stock which you have testified to as having been disposed of by the company during that term of years?

A. Yes, sir.

Q. You have had no difficulty in floating your stock, have you?

A. No, sir.

Q. It has commanded a great premium in the open markets of the city and of the country, has it not?

A. Yes, sir, it has.

Q. In your affidavit made in this case you say that the company has from the proceeds of its debentures of July 1st, 1904, $6,200,423.64 in cash and $6,517,071.00 in temporary investments. What do you mean by those temporary investments?

A. I mean that the investments are of such a nature that they could be liquidated in a very short time; in other words, that the company could realize cash on them without delay in the event of it requiring the cash.

Q. Are they investments in stocks?

A. They are not, no, sir; except possibly the case of the city stocks, which of course could be realized upon almost at an hour's notice.

Q. Well, that is practically of a fund of over $12,000,000 which you have waiting disposal in any manner that you think proper?

A. Awaiting disposal in a permanent form in the shape of construction at Astoria.

Q. Nothing to prevent your investing it in any stocks or in any manner that you think proper, is there?

A. There is, because investing it in any other form would render it perhaps extremely difficult to realize upon such investment when we required the cash.

Q. Then it is merely a matter of convenience with you?

A. Entirely so, the intent being to keep those funds in such shape that they will be available without any delay.

Q. There is nothing however to prevent you from using
515 that $12,000,000 for investments in stocks, if you so desire.

A. Nothing to prevent us that I am aware of.

Q. And as you use any part of that $12,000,000 for the Astoria plant, that amount so used is deducted from this $12,000,000?

A. Yes, sir.

Q. How much money have you on hand deposited by consumers?

A. As of October 31st?

Q. As of October 31st, 1905.

A. $904,520.07.

Q. What is done with the money of the consumer; is it used in the business of the company?

A. Probably included in some of these temporary investments.

Q. You pay a rate of interest on the money deposited by the consumers, do you not?

A. More correctly speaking, I should say that it was at the present time invested in the plant and the property of the company. If not in cash or represented in accounts receivable, it is represented in some of the assets current or permanent of that period of that date.

By Mr. GANS:

Q. Not held as a separate fund?

A. Not held in a separate fund.

By Mr. MATHEWSON:

Q. He asked if you paid interest on these?

A. We do pay interest, yes, sir.

By Mr. BURR:

Q. You could not say in what particular fund or particular funds this money is placed?

A. No.

Q. What rate of interest do you pay on that money?

A. The legal rate, six per cent.

Q. So that in addition to the million and odd dollars which you have as cash capital you use also this nine hundred and odd thousand dollars additional in your business?

516 A. That is kind of a mixture of assets and liabilities. We have that amount that consumers have deposited represented in some of our assets. It is not in addition to anything else, it is there as an amount.

Q. I do not know what the technical term may be, but I ask you a plain, simple straightforward question: Is not nine hundred and odd thousand dollars deposited with you by the consumers used in the business of the Consolidated Gas Company?

A. It is.

Q. Is the million and odd dollars which you said you had on hand as capital also used in the business of the Consolidated Gas Company?

A. As working capital is engaged.

Q. So that both of those items are used in the business of the Consolidated Gas Company?

A. Not in the shape of cash.

Q. I want to know what is the fact.

A. Well, I have testified to the fact. I testified to our requiring a million dollars in cash as working capital; from what sources that might be derived, among other resources, I have not testified; it would be an impossible thing to do.

Q. Then do you want us to understand that the nine hundred and odd thousand dollars of the consumers forms part of the million dollars cash working capital?

A. No, not necessarily; it might; you can consider it so if you choose.

By Mr. MATHEWSON:

Q. It is not kept separately?

A. It is not kept separately.

By Mr. BURR:

Q. I do not choose anything, I want the fact.

A. We do not separate that fund from any other fund or any other investment or any other asset.

517 Q. Well, Mr. Carter, do you want me to understand that you cannot tell whether you have in addition to the million dollars cash working capital, nine hundred and odd thousand dollars deposited by the consumers engaged in your business?

A. Engaged in the business, but not as cash.

Q. In what way is it engaged in the business if it is not engaged as cash?

A. It might be.

Q. I am not asking what it might be; in what way is it?

A. Well, it would have to be one way or the other; it would have to be either in cash or have to be represented in some asset of the company.

Q. Can you tell me what other asset?
A. I cannot.
Q. Why not?
A. Because we do not keep track of it as a separate fund.
Q. Is there any reason why you do not keep track of it as a separate fund?
A. Because it would serve no purpose to do so.
Q. Is it a fact that the twenty million of six per cent. debentures was divided at par among the stockholders on or about July 1, 1904?
A. Not the entire amount; the exact amount has been testified to, I think it is $19,857,600.00, if my memory serves me.
Q. Was not the stock of the Consolidated Gas Company selling at $204.00 per share at that time?
A. No, sir, it was not. I don't remember the figure it was selling at at that time, but it was very much below 204.
Q. Well, can you get me the exact figure at which it was selling on July 1, 1904?
A. Why, we have a record kept, we have a record of the quotations, I can get it or get it from the daily papers.

Mr. BURR: Have you got that record, Mr. Mathewson?

Mr. MATHEWSON: No, sir, it is easily accessible, of course;
518 the *Financial Chronicle* will tell it. We can get it if you prefer us to do it; it is a simple proposition.

Q. Didn't you testify that the average was $204.00 a share for the past five years?
A. I think not; I don't recall doing so.

Mr. MATHEWSON: If you will read Mr. Bennett's affidavit towards the end you will see just what he did testify to. Mr. Bennett made the affidavit on that subject; Mr. Carter and he are both familiar with the facts; Mr. Carter has testified here on the subject. It is on page 46 of our affidavits—average price for 1901 was about 214 and so on; he didn't state for the five years.

Mr. GANS: Wasn't there an Exhibit which covered the average price?

Mr. MATHEWSON: The Exhibit shows the high and low in each year, not the average.

Q. Can you say what the rate was, Mr. Carter, at which the stocks sold on July 1, 1904?
A. No, sir, but I can ascertain it for you.
Q. Will you also ascertain what the average rate was at which it sold in the past five years?
A. Yes, sir.
Q. The result of this division of the $20,000,000 or thereabouts of six per cent. debentures, in the way you have stated, wasn't that equivalent to dividing a bonus among the stockholders instead of using it for construction.

Mr. MATHEWSON: I object to that; isn't that a particular kind of conclusion? The fact is these debentures were issued at par, sold

stockholders at par, and the question is whether that was not
519 equivalent to dividing a bonus. Isn't that a conclusion from the facts? Is there any obligation in any law that you must issue securities and get more than a dollar of cash for each dollar of securities you issue? I do not know of any.

Mr. BURR: He can state what it was.

The MASTER: I will allow it.

Exception.

A. I cannot figure it out so.

Q. What do you figure it out to be if it was not a distribution of a bonus up to that extent among the stockholders?

A. To what extent?

Q. To the extent of the nineteen million and odd dollars?

A. That was not a distribution among the stockholders; the stockholders paid that amount of money into the company.

Q. I will show you the statement in the affidavit of Mr. James A. Bennett as it appears on page 46 of the affidavits and notice of motion made herein and ask you if it is not shown there that the average was 201 in 1904?

A. That might be the case and the stock might not have been selling at that price on the first of July, 1904.

Q. Well, that you will ascertain for us?

A. Yes, sir.

The MASTER: Would it not be better instead of lumbering up this record with all these questions about stocks and prices and dividends to stipulate that either party may use the *Financial Chronicle* files and put them in? I think that is customarily done in all references involving Wall Street matters, and then have the files here and use your figures from them whenever you want them; it would save considerable work, it seems to me.

Mr. BURR: Yes, that would be a good thing if we had
520 them here. I am trying to get a statement from the witness here on which I may base another question and not having the information it prevents me from continuing along that line.

Q. Did you have anything to do with the purchase of the Astoria plant?

A. No, sir, and, I might say, if the question applies to the purchase of the Astoria plant by the Consolidated Gas Company, there is no such transaction of record.

Q. The testimony is here that before that ground was purchased, and before it was accepted as a plant by the Astoria Light, Heat & Power Company, Mr. Bradley was sent over to view it and look at it, he being the chief engineer of the Consolidated Gas Company; but whether he made a written report in regard to the matter or not he is not quite clear in his mind; he has no exact remembrance of it, but he did consult with some of the directors, he is quite positive. I am asking you whether you were consulted in regard to the purchase of that ground, upon which it was proposed to construct the Astoria plant?

A. No, sir.

Q. You had nothing at all to do with the purchase of that land?
A. No, sir.
Q. And you are not a director in the Astoria Light, Heat & Power Company?
A. No, sir.
Q. Nor any other officer?
A. No, sir.
Q. Are you a director or officer in any other gas company outside of the Consolidated Company?
A. I am an officer of the Westchester Lighting Company.
Q. What position do you occupy in that company?
A. Secretary and Treasurer.
Q. Do you receive an additional salary as an official in that company?
A. Yes.
Q. Is that paid out of the funds of that company or out of
521 the funds of the Consolidated Gas Company?
A. Out of the funds of that company.
Q. Do you own stock in that company?
A. No, sir.
Q. Have you been able to get any further information as to the location of the seventy miles of abandoned mains that have been spoken of here?
A. I have not undertaken to. I understood that you asked Mr. Simpson to obtain some such information, if possible. We have no records in the accounting department whatever that would indicate the location of them.
Q. Who are the officers of the National Coke & Coal Company?
A. I think Mr. George W. Doane is the President of the company, and I think Mr. Lambrecht is the Secretary.
Q. Is that the same Lambrecht who is auditor of the Consolidated Gas Company?
A. The same.
Q. Are there any other officers of the Consolidated Gas Company who are officers or directors in the National Coke & Coal Company?
A. As directors, yes. Outside of Mr. Doane, all of the directors are connected with the Consolidated Gas Company.
Q. And that company simply does the trucking for the Consolidated Gas Company?
A. That is the case, carting of coke particularly; it handles the coke and sells it.

By Mr. GANS:

Q. On commission from the Consolidated Gas Company, or does it buy it from the Consolidated Gas Company and then sell?
A. It buys and sells.
Q. Buys from the Consolidated Gas Company?
A. It buys from the Consolidated Gas Company and sells to the customers.

Mr. MATHEWSON: And the profit comes back to the Con-
522 solidated Gas Company in the way of dividends.
Mr. GANS: I understood that.

Q. On page 33 of the affidavits and notice of motion in this case it says, "the investment of the Consolidated Gas Company in the stock of the National Coke & Coal Company above mentioned is $50,000." Is that correct?

A. Yes, sir.

Q. To whom was that paid?

A. It was paid into the treasury of the National Coke & Coal Company.

Q. What did the National Coke & Coal Company have when that was paid into it? What property had they?

A. I think they employed that in the purchase of property.

Q. So that it had no property other than an agreement, possibly, with the Consolidated Gas Company to do its trucking?

A. That is the case.

Q. And has that been a very profitable business since the formation of the company?

A. Quite profitable, yes, sir.

Q. Has it made as much as 25% per annum on its capital?

A. Yes, sir.

Mr. MATHEWSON: Mr. Carter so testified yesterday. There is a statement in the printed record, if you desire it, showing just what was paid.

Q. What officers or employees of any kind, other than the contractors, mechanics or laborers, engaged in erecting the Astoria plant, are employed by the Astoria Light, Heat & Power Company whose salaries or wages are charged to the cost of building that plant?

A. I should have to have their pay-roll to testify to that.

Q. Do you keep their payrolls?

A. Their payrolls are in our office, available.

523 Q. Is all engineering and accounting cost of such plant paid by the Consolidated Gas Company and charged to the cost of its operation.

A. Paid by the Consolidated Gas Company?

Q. Paid by the Consolidated Gas Company.

A. Nothing of that kind is paid by the Consolidated Gas Company. The Consolidated Gas Company advances money to the Astoria Light, Heat & Power Company, but they pay their own bills and settle their own payrolls. And, as it is not an operating company, there is no charge in the nature of an operating expense. The company is only engaged at present in constructing a plant.

Q. Are the salaries of the chief engineer, and his assistants, of the Consolidated Gas Company, doing work at Astoria, charged to the general expenses of the Consolidated Gas Company?

A. No, the chief engineer is not so engaged. We have an engineer—I am not sure at the moment whether he is on the Consolidated payroll or not. If so, his salary is charged against the Astoria Light, Heat & Power Company.

Q. Are you quite sure about that?

A. Perfectly sure.

Q. Then you do know that he does work over there?

A. Certainly, he does work over there.

Q. And that his salary is charged against the Astoria Light, Heat & Power Company?

A. Yes.

Q. And that is true of all his assistants?

A. Now, you are referring to whom? I am referring to the constructing engineer.

Q. I am referring to the general engineer, the chief engineer of the Consolidated Gas Company?

A. No; the salary of the chief engineer of the Consolidated Gas Company is not a charge against the Astoria Light, Heat & Power Company. The salary of the constructing engineer is a charge against the Astoria Light, Heat & Power Company.

524 Q. Who is the constructing engineer?

A. Mr. Bruce.

Q. Don't you know that the result of the work of Mr. Bradley at the Astoria plant, and his supervision of the work there, have necessitated the doubling of the number of employees that he had under him in his department?

A. No, if there has been any addition on account of the Astoria plant, the charge is to the Astoria Company, and not against the Consolidated Gas Company.

Q. The additional help that he would be compelled, per force, to employ would be charged against the Astoria Light, Heat & Power Company, and not against the Consolidated Gas Company?

A. That is the case, yes, sir.

Q. And his salary and the salary of his subordinates are not entered up in the general expense account of the Consolidated Gas Company?

A. I have testified that the salary of the chief engineer, or the engineer in chief, Mr. Bradley, of the Consolidated Gas Company, is an expense of the Consolidated Gas Company, but that any assistants that he has, made necessary by the operations at Astoria or by the construction at Astoria, is an expense or enters into the cost of that construction, and not into the expense of the Consolidated Gas Company.

Q. That of course will appear by your books?

A. Absolutely, yes, sir.

Q. And by your payrolls?

A. Yes, sir.

Q. Now, can you say offhand how much of your stock issued is used, or what percentage of your capital stock is used, in the manufacture of gas, as distinguished from an investment in other companies or corporations?

Mr. GANS: Before that question is answered, may I consult with Mr. Burr?

Mr. BURR (after conference): We will withdraw that
525 question for the present. That is all I will ask of this witness until he gets those statements that he has promised to prepare for us.

The MASTER: How about you, Senator Page?

Mr. PAGE: I would prefer to defer my cross-examination until Mr. Mathewson has completed with the witness. I do not care to examine him piecemeal.

Mr. MATHEWSON: We may not recall him.

Mr. PAGE: You stated that you would suspend with him until you could go on with another branch. I would prefer that you exhaust him.

Mr. MATHEWSON: Very well. I offer in evidence certified copy of certificate of incorporation of the Astoria Light, Heat & Power Company, dated January 19, 1899.

Mr. BURR: Objected to as incompetent, irrelevant and immaterial.

Mr. GANS: We make the formal objection that it is irrelevant and immaterial.

Objections overruled; exception taken by Mr. Gans and Mr. Burr.

Received in evidence and marked Complainant's Exhibit 87.

Q. I will ask you the question whether this certificate was filed in the public offices, the offices of the Secretary of State and the County Clerk, at or about the time of its date?

A. Yes, sir.

Mr. MATHEWSON: I offer in evidence certificate of incorporation of the National Coke & Coal Company, dated November 11, 1901.

Mr. GANS: We make the same formal objection, as to irrelevancy and immateriality.

Mr. BURR: The same objection.

526 Objections overruled; exception taken by Mr. Burr and Mr. Gans.

Received in evidence and marked Complainant's Exhibit 88.

Redirect examination by Mr. MATHEWSON:

Q. I will ask you the same question, as to whether this was filed in the office of the Secretary of State and the County Clerk's office, as prescribed by statute?

A. Yes.

Q. In what county is Astoria located?

A. Queens.

Mr. BURR: Is this the company that does the carting?

Mr. MATHEWSON: That is right.

Mr. BURR: It says here—organized to carry on the business of miners, engineers and coaling.

Mr. MATHEWSON: Yes, they can do almost anything; what they do do is carting and selling.

Q. Referring to the New Amsterdam, the Standard and the Mutual Gas Light Companies, the New York Edison Company, the New York Electric Light & Power Company and the Westchester Lighting Company, they include, I think, the companies some of the stock of which you said was owned by the Consolidated Gas Light Company?

A. Yes.

Q. Are there any others that you named?

A. The National Coke & Coal Company, and the Astoria Light, Heat & Power Company.

Q. Of the National Coke & Coal Company, and the Astoria Light, Heat & Power Company, as you have already testified, the Consolidated owns all the stock?

A. Yes.

527 Q. As to the three gas companies which I mentioned, the New York Edison Company and the United Electric Light & Power Company, does the Consolidated Gas Company own all the stock of any one of those corporations?

A. It does not, no, sir.

Q. Is not the Westchester Lighting Company the only lighting company all of whose stock the Consolidated Gas Company does own?

A. Yes, sir.

Q. The Mutual Gas Light Company was in existence, was it not, when the Consolidated Gas Company was formed in 1884?

A. Yes, sir.

Q. Do you know whether the Standard and the New Amsterdam were organized by the Consolidated Gas Company or its interests, or were they organized in hostility to it?

A. In hostility.

Q. Were the electric companies to which you referred organized by the Consolidated Gas Company or in hostility?

A. In hostility.

Q. In reference to your gas stove business, that is, the renting or putting out of stoves to consumers, was that done primarily for the purpose of selling stoves or increasing the output of gas?

Mr. GANS: We object to that as irrelevant and immaterial.

Mr. MATHEWSON: It is a subject that has been gone into.

Objection overruled; exception taken by Mr. Gans.

A. For the purpose of increasing the output of gas.

Q. Merely a means to that end, was it?

A. Nothing else.

Q. Referring to the bo-ks of the company and the statements made therefrom, respecting which Mr. Burr asked you, are

528 you and have you for many years been familiar with the books of the company?

A. Yes.

Q. And the methods of entry?

A. Yes.

Q. And the checks upon the books?

A. Yes.

Q. Have you from time to time and frequently had occasion to test the accuracy of the books in one way or another?

A. I have had occasion to, yes, sir.

Q. Have you found them correct?

A. I have, yes.

Q. Correct statements of transactions of the company?

A. Yes.

Q. Have you any hesitation in saying, from your knowledge of

the character of the books, that the statements therefrom delivered to Mr. Bradley and Mr. Simpson were true statements of what they purport to be?

Mr. PAGE: That is objected to as being entirely irrelevant, immaterial and incompetent.

The MASTER: I do not see how that adds anything to the case.

Mr. MATHEWSON: Very good. Mr. Burr asked him about those statements, how they were prepared, etc.

Mr. BURR: They were probably in three or four hands before they reached his. That was his testimony. Is the question withdrawn, or what is the disposition of the question?

Mr. MATHEWSON: If the Master does not think it will add anything, I should hardly press it.

The MASTER: I will sustain the objection, and you can except.

Mr. MATHEWSON: No, I do not care to.

Q. I will ask whether these statements which were delivered or any of them, delivered to Mr. Bradley in this connection, were *vised* by you before they were delivered?

A. Yes, they were.

529 Q. You were asked with reference to the franchises of the company, and rights, which were included in the $7,781,000.00. I think you did not mention, as included therein, the rights of the company to operate in the streets, as acquired by the constituent companies. Do you consider that as part of the value of $7,781,000.00?

Mr. GANS: Objected to on the grounds that no foundation has been laid therefor, there being no proof that they have any right to operate in the streets.

Mr. BURR: And further objected to because this witness testified that he did not know anything in regard to it, that he was merely guessing.

Mr. MATHEWSON: You asked him what right or franchises he had in mind as included in that figure. I am merely asking him if those rights and franchises to operate in the streets were in his mind.

Mr. GANS: If he will state what he believed to be rights to operate in the street, I have no objection.

The Master: Never mind, it is of no great importance anyway. I will allow him to answer. If they do not show any rights in the streets, his testimony is of no value.

A. I intended to cover that point in my answer. I assumed that the rights to operate in the streets were included, and that they existed at that time, since the companies were exercising such a right.

Mr. MATHEWSON: Whatever they are, of course we will present in another form.

Q. Regarding your answers in respect to what was meant
530 by temporary investments; I show you Exhibit 80. Where an investment is made in the stock of any other illuminating company, electric or gas company, such as stock that you have testi-

fied the Consolidated Company holds of that character, would you call that a temporary or permanent investment?

A. A permanent investment.

Q. Where funds are held in hand, as this $12,717,494.64 is, shown on Exhibit 80, for the purpose of payments on new construction, as it may be required, as to the items in there outside of cash, would you call it temporary or permanent?

A. Temporary.

Q. That is the distinction you make?

A. That is the distinction I make.

Q. In regard to the eight millions in Government bonds and three millions in City stocks, to which Mr. Burr referred, do you regard that as temporary or permanent?

A. Temporary investments.

Q. Were they not investments of a portion of the proceeds of this $19,857,000 of debentures of July 1, 1904?

A. They were.

Q. Pending their turning into permanent construction?

A. Yes.

Q. Referring again to Exhibit No. 80, there appear to be plants and property, Manhattan and Astoria, amounting to $53,224,984.91; materials and supplies $616,470.08; National Coal & Coke Company, $50,000; accounts receivable, $2,000,000; does that $2,000,000 refer to the accounts receivable which you stated were required as working capital?

A. I testified to a million dollars as working capital, and two million dollars accounts receivable as the amount that normally would be so tied up.

Q. In this entire statement comprising the total in the gas business and excluding the $12,717,494.64, which is stated to be in temporary investment, pending turning into construction, there is
531 only one item in the assets in cash, and that is one million dollars, is it not?

A. That is all.

Q. And in view of the fact that you do not keep consumers' deposits in a separate account, is it possible to say whether the $904,000 of consumers' deposits, forms part of that one million dollars, or whether it has gone into some other asset through accounts receivable?

A. Impossible to say.

Q. But the one item of cash that appears and that you claim in that statement as working capital is one million dollars in whatever form it appears?

A. That is so, yes, sir.

Q. Where is the exhibit showing the selling price of stock from 1884 down to date? Have you got it?

A. No, I don't think I have it. It is in that book and is to go into the case as an exhibit. But I made no statement.

Mr. PAGE: Page 2180.

Q. When are these debentures convertible into stock of the Consolidated Gas Company?

A. July 1st, 1907.

Mr. GANS: And at any time after that?

Q. I will ask you to look at the statement of dividends from 1885 down to 1905, in evidence, and say whether stock of this company in 1887 did not sell as high as $241.50 a share?

A. Yes, sir.

Q. And in 1897 it sold at exactly the same figure, didn't it?

A. Yes, sir.

Q. Those are the two highest figures at which it did sell, are they not?

A. Yes, sir.

Q. In between, in 1891, how low did it sell?

A. At $92.50.

Q. And are you able to say that between now and July 1st, 1907, the stock may not be selling below par before the date for conversion comes about?

532 Mr. PAGE: Objected to as incompetent, irrelevant and immaterial.

The MASTER: Cannot I answer that just as well?

Mr. MATHEWSON: I think you can. It seems to me there are a number of questions which could be answered that way.

Mr. GANS: About the debentures, so as to clear the matter up, are they convertible merely on the date you gave or on that date and any date thereafter?

The WITNESS: On any subsequent interest date down to and including January 1, 1909, and they are redeemable July 1st, 1909, at par.

Q. They are payable then?

A. Payable.

Q. Then the period of the pos-ible conversion extend- from what date to what date?

A. From July 1st, 1907, to January 1st, 1909.

The MASTER: The interest stops on that last date?

The WITNESS: Yes.

Q. At what low price did the stock sell in 1903, the year before these debentures were issued?

A. $164.

Q. Your attention has been called by counsel to the selling value of the stock in connection with the amount of dividends that it was paying. This was stock covering both the investment in the electric companies and in the gas business, was it not?

A. Yes, sir.

Q. Your attention has also been called to the affidavit of Emerson McMillan, submitted in this case, and counsel has stated generally as I recall it that Mr. McMillan spoke of ten per cent. dividends.

533 I will read you from this affidavit and ask you if that modifies your reply in any manner: "I am fairly familiar with the market values of the stocks and bonds of gas companies engaged in business in the city of New York and other cities in this and other States. Many of the securities here and elsewhere have in the past

sold above par and have paid a low rate on the investment; but in such cases the prices have been based on the assumption of perpetual franchises or such consideration by public authorities as to warrant the belief that the property will continue to be treated with the same consideration and right and protection as is accorded to other classes of investments. Where these conditions do not apply, investors will not be satisfied with less than a ten per cent. basis of earnings even though a much lower rate of dividend may be paid. Even before the recent disturbances relating to public utility corporation securities, but few gas or electric company securities would sell at par when the net earnings were less than ten per cent. on the investment. Of some ten or more companies purchased through my direction since the year 1900 none were purchased on less than a nine per cent. basis of net earnings, and the average cost of all these companies was above a ten per cent. basis on net earnings." Do you understand that Mr. McMillan referred to the earning capacity or the dividends paid?

Mr. PAGE: This is objected to as incompetent, immaterial and irrelevant. If it is sought to introduce the testimony of Mr. McMillan in the shape of his affidavit it is incompetent, and Mr. McMillan should be produced here as a witness. If it is sought to ascertain the opinion of this witness as to Mr. McMillan's statements, it is entirely incompetent, irrelevant and immaterial.

534 Mr. GANS: Also it is not a question upon which opinion evidence may be given.

Mr. MATHEWSON: It was not I who introduced Mr. McMillan's affidavit or questioned the witness respecting his statement or whether he agreed with him or quoted the statement of Mr. McMillan.

Mr. GANS: Let me see if I am clear as to the condition of the record. The question was asked and I objected to it and counsel offered to withdraw it and the Master said he was inclined to sustain my objection to it; we then asked to have it physically struck from the record and Mr. Mathewson objected to it and the Master declined to physically strike it from the record; therefore as I understand the record of this proceeding, for the purposes of your examination, that matter is not in on the basis of Mr. Burr's question; it is just one of the matters that we left in because everything goes in although technically excluded.

Mr. MATHEWSON: The witness had answered the question and I took the chance of the answer to the question.

Mr. BURR: In the question proposed by Mr. Mathewson now he undertakes to recite the experience of Mr. McMillan in regard to certain companies he has had dealings with and asks the witness with regard to the experience of Mr. McMillan with regard to those companies. The sole object of referring to the affidavit on my part was to call the witness's attention to the statement made by Mr. McMillan in this affidavit used before Mr. Justice Lacombe, that investors would not be satisfied with anything less than ten per cent. dividends on properties of this character.

535 Mr. MATHEWSON: Yes, but he said earning capacity and not dividends.

Mr. BURR: And I asked in view of the statement made by this witness that dividends had been on the average in the past 24 years only 6½ per cent. on the Consolidated stock and that they had no difficulty in floating that stock in the market, whether that in his opinion was a true statement or not, borne out by the facts he had stated, so it was only in comparison with his statement, the facts in his statement disagreeing with the statement in Mr. McMillan's affidavit.

The MASTER: I sustain the objection and give Mr. Mathewson his exception. It may be that after I see the question written out in the record which you asked, I will conclude that I have no right to do that. If you have opened the door to it, no matter how improper this question may be on its face, I will allow this question.

Mr. PAGE: Only as against the City.

The MASTER: Yes, you have protected your rights.

Mr. MATHEWSON: Will you sustain the objection without prejudice to my raising the question hereafter?

The MASTER: Yes. I do not recall Mr. Burr's question now.

Mr. MATHEWSON: Mr. Burr used the expression "dividends of ten per cent."

Q. I will ask you to look at Mr. McMillan's affidavit.

The MASTER: He may answer the question.

A. My understanding is that Mr. McMillan's referred to
536 the earning capacity of the companies that he had been concerned with.

Q. In view of the objection to that question, I will ask you to examine Mr. McMillan's affidavit, and to see whether in the statement he referred to dividends paid at ten per cent., or earning capacity, that is, earnings of ten per cent.

Mr. GANS: The record as to this will stand the same as to the previous question.

The MASTER: Yes.

A. He very clearly has reference to earning capacity, and not to dividends.

Q. Does he state——?

A. He states so clearly.

The MASTER: Mr. Mathewson, is that a matter for testimony?

Mr. MATHEWSON: Yes.

The MASTER: All these papers are before me under the rule, and counsel can refer to them in argument or brief, and what is the use in asking this witness that Mr. McMillan says in his affidavit, if it is before me on the final submission.

Mr. MATHEWSON: I submit that I was not aware——

The MASTER: It is not before me as proof of a fact, but it is before me as part of the record to which counsel refer.

Mr. MATHEWSON: But I did not wish it to appear as it might appear in the record in our State Courts that Mr. McMillan had stated that 10% dividends should be paid. That was the point.

The MASTER: No.

Q. Referring to Exhibit 79, showing the increases in differ-
537 ent items of property included under "Real Estate, plant, property and construction" from November 11, 1884, to October 31, 1905, in what case is an addition to construction or a net addition to construction as it appears there inserted in your record? Does that mean additional property or construction, or what does it mean?

A. Well, in every case, if I understand your question, with the exception of one single item of furniture and fixtures.

Q. But office furniture and fixtures there appears to be less in 1905 on October 31st than in 1884, does it not, according to your books?

A. Yes, sir.

Q. There is an increase in every other item?

A. Yes, sir.

Q. Take for instance the matter of mains. If a six inch main is removed or replaced and a twelve inch main is laid in its place, what proportion goes to increase the capital of the main account and what proportion to the replacement of mains?

A. The portion that goes to increase the capital account is the cost of the twelve inch main less the cost of the six inch main with such an allowance as may be had for scrap value of the six inch main.

Mr. GANS: Is such an entry made upon the books of your company?

The WITNESS: Such an entry is made upon the books of our company.

Q. So that the net increase of plant in that regard would be the difference between the six inch main with the allowance for what it would bring as scrap and the cost of the twelve inch main?

A. Yes, sir.

Mr. PAGE: I do not exactly understand that. Is that allowance additional or is it allowance for the six inch main and scrap?

Q. Make that clear.

A. The six inch main would be taken out of the mains ac-
538 count at its full value, that is, at its cost, the value at which it appears in the mains account. The twelve inch main would go into the mains account at the cost of laying it. The charge to replacement would be the value of the six inch main less what might be recovered from any scrap value of the six inch main.

By the MASTER:

Q. Who makes that distribution?

A. With respect to the accounting?

Q. Yes, for your books?

A. It is a monthly function of the accounting department to take reports from the street department or mains and services department of operations of that kind. The replacing of a small main with a larger main and having the value of the small main that is taken out of the ground, the length of it at a given value forms the basis of the entry by which the mains account is credited, and the replacement account charged. Before the entry is finally made in the

ledger the value of the main taken out as scrap, so much of it as has a scrap value is allowed for so that the net amount charged to replacement account is the difference between the original value of the six inch main and the value of the scrap. It is a matter of accounting and bookkeeping and is a monthly transaction in the bookkeeping department.

By Mr. MATHEWSON:

Q. The figures as to the cost of property replaced I assume are in the hands of the accounting department?

A. Yes, sir.

Q. And the expenditure that is made for new mains or new property is shown to them by some memorandum they get from the expending department?

539 A. They would get that report in the case of a new main being laid, whether it was an extension or replacement. They would get a report from the street department of the pipe employed and the castings and sizes, &c., and from the payroll they would get the cost of labor involved in laying that main.

Q. So that the accounting department has data for an exact assignment of these items to replacement or new construction, has it?

A. Precisely. I might explain that until used either for the extension of mains or for the repairing of mains, the pipe and the special castings are carried in the pipe and special account.

Q. Then the third figure column of this Exhibit 79 headed "Depreciation Renewals Since Consolidation" relates, does it, to actual replacements during that period?

A. Yes.

Q. At original cost of the articles replaced?

A. At original cost of the articles replaced.

Q. And the column headed Net Increase shows the exact increase in each class of items of plant, October 31, 1905, over November 11, 1884?

A. Precisely so, plant and other property.

Q. Will you state which one of the items in that column is in red ink and what that indicates?

A. Office furniture and fixtures account.

Q. Give the amount, and state what that indicates.

A. It indicates that the value at the time of consolidation of $70,000 has been reduced since November 11, 1884, to a value of $30,291.27.

Q. And the expenditure for repairs in the last column, is that in addition to the replacements and new construction?

A. Absolutely additional to the expenditures for replacements or for additions.

Q. Is that actual expenditures?

A. Actual expenditures.

Mr. MATHEWSON: That is all I have to ask for the present.

540 Mr. GANS: I think we ought to have an understanding on one subject. Mr. Mathewson foreshadowed yesterday that

there was another topic upon which this witness might be called upon to testify, namely the cost of the manufacture of gas.

Mr. MATHEWSON: He will present a statement to-morrow morning. Mr. Carter, I will say, has had a statement sent down from the accounting department, but for further assurance he desires to check it himself. Let me see it Mr. Carter, and I will show it to you, Mr. Gans.

Mr. GANS: I am not at all curious, but what I was getting at is whether he was to be recalled on that topic at some time in the future.

Mr. MATHEWSON: Yes.

Q. Can you have, also a statement for the calendar year 1905?

A. Yes, sir, I will bring it with me.

The MASTER: Is there any further witness that you can take up this afternoon?

Mr. MATHEWSON: I have not any. I assumed Mr. Page would proceed with his cross-examination.

At 4 P. M. adjourned to July 25, 1906, at 2 P. M.

Last Exhibits:

Complainant's 88.
State's A.
City 1.

541 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, WEDNESDAY, *July* 25, 1906—2:00 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr.

542 ROBERT A. CARTER further examined.

Redirect-examination continued by Mr. MATHEWSON:

Mr. MATHEWSON: I offer in evidence Consolidated Gas Company comparative condensed balance sheet as of October 31, 1905, and November 11, 1884, showing the variations, in the third column, of assets and liabilities.

Mr. BURR: Same objection to this as made to all these papers here-

tofore offered purporting to be statements from the books, on the ground that they are not the best evidence, and I understand you receive them subject to an opportunity being afforded to us to verify the statements contained in these summarized statements.

The MASTER: Yes, I understood that that was the arrangement.

Mr. GANS: That will apply to all summaries offered in this form, so I assume we need not in each instance state the conditions under which the paper is received.

The MASTER: No, it is not necessary.

Mr. MATHEWSON: The offer just made is from page 2213 and 2214 of the record before the Gas Commission.

Objection overruled; exception.

Received in evidence as Exhibit 89, but not marked.

Q. Under the column variation, I see that the items "in assets, $62,441.36, in liabilities $449,507.53," and "in bonds and mortgages $38,676.67," are starred respectively and referred to as printed in the exhibit in red ink. What is the significance of that red ink?

A. That indicates that there has been a decrease in the
543 balance of October 31st, 1905, as compared with November 11th, 1884.

Q. Any other items, none of which are starred and which are marked as in red ink, they are increases?

A. They are increases, yes.

Q. You were asked yesterday respectively the average market price per share of Consolidated Gas stock in certain years, and for five years, and the price on July 1st, 1904, and you stated to opposing counsel that you would answer the inquiry. Will you do so now?

A. Shall I read this memorandum or offer it as an exhibit?

Mr. MATHEWSON: I do not think it is worth while putting it in as an exhibit; it is very brief.

The WITNESS: The average price for the five years ending December 31st, 1905, at which the Consolidated Gas Company's stock was quoted on the New York Stock Exchange was 204⅛.

Q. How did you obtain that average?

A. By finding the average of each year and then averaging the averages. The price at which it was quoted on July 1st, 1904, was 193.

Mr. MATHEWSON: I offer in evidence the following papers: Grant to the New York Gas Light Company, being Articles of Agreement dated May 12, 1823, between the Mayor, Aldermen and Commonalty of the City of New York and the New York Gas Light Company, printed in the Gas Commission record on pages 736 to 741, inclusive. (Volume 2.)

Mr. GANS: I object to it at this time and in this way. Probably I shall be willing to agree that most of them go in later in this form, after I have had an opportunity to look at them.

Mr. BURR: Inasmuch as we have raised a special defense
544 as to the validity of the franchises we would require to inspect the originals.

Mr. MATHEWSON: Very good; we will proceed in that way. I withdraw the offer in evidence for the present.

Q. Referring to the gas manufactured for the Consolidated Gas Company by other companies; was and is the gas manufactured under written agreements?

A. Yes, sir.

Mr. PAGE: Are you going into the gas manufacture?

Mr. MATHEWSON: No, merely to show the *the* agency agreements. I offer in evidence paper headed "Agency Agreement," being agreement dated the 31st day of December, 1902, between the Consolidated Gas Company of New York and the New York Mutual Gas Light Company, for a term of five years, and which is to be found in the printed record before the Gas Commission, page 489.

Received in evidence as Exhibit No. 90, but not marked.

Mr. MATHEWSON: I offer in evidence a paper entitled "Agency Agreement," being agreement dated 31st of December, 1902, between the Consolidated Gas Company and the New Amsterdam Gas Company, to be found on the Gas Commission printed record, page 491.

Received in evidence as Complainant's Exhibit 91, but not marked.

Mr. MATHEWSON: I also offer in evidence a paper entitled "Agency Agreement," being agreement made 31st of December, 1902, between the Consolidated Gas Company of New York and the Standard Gas Light Company, which will be found on page 495 of the same printed record.

545 Received in evidence as Complainant's Exhibit 92, but not marked.

Mr. MATHEWSON: I am informed that there is no written contract between the Consolidated Gas Company and the Central Union Gas Company, from which it receives a very small amount of gas. I am informed it is not furnished under written agreement.

Q. Have you prepared, Mr. Carter, a summary of the operations of the Consolidated Gas Company for the nominal year ending October 31, 1905, stating in detail the amount of material used and other items of manufacture and distribution?

A. Yes, sir.

Q. Is that the paper?

A. That is the paper.

Q. In the paper which I have shown you the next to the last column is headed "Cost per thousand c. f. made;" that means cubic feet made, does it?

A. Per thousand cubic feet made, yes, sir.

Q. And does that indicate the cents per thousand which each one of these items represents on the make of the company?

A. Yes, sir.

Q. While the final column is headed "Cost per thousand cubic feet sold?"

A. Yes, sir.

Q. And similarly that represents the cents per thousand on each of the items on sales?

A. Yes, sir.

Mr. MATHEWSON: I offer this in evidence.
Mr. BURR: Same objection as I have made to all these statements.
Mr. GANS: I join in that objection.
The MASTER: Same ruling; exception.
Received in evidence and marked Complainant's Exhibit 93.

Q. About half way down the statement, Exhibit 93, I find
546 the words "station cost," and to the right of those words $3,483,562.20, and under "cost per thousand cubic feet sold" 33.70 cents. Does this refer to the gas manufactured by the Consolidated Gas Company itself?

A. Yes, sir.

Q. Under that is another heading, "Cost of gas manufactured under agency agreements." Is that a reference to the agency agreements which have just been put in evidence?

A. Yes, sir.

Q. And that then is manufactured by other companies for the Consolidated?

A. Yes, sir.

Q. Does $1,022,236.28 represent the cost of that gas?

A. To the Consolidated Company, yes, sir.

Q. And the 34.42 cents in the last column represents the cost per thousand feet sold to the Consolidated, of gas delivered to it by the other companies under such agreements?

A. Yes, sir.

Q. Under the heading to which I have just referred is the word "total," and in the final column 33.85 cents; what does that represent?

A. The total expenditures, station expenditures in connection with the manufacture of gas and the station expenditures of the companies who manufacture it for the Consolidated Company under the agency agreements.

Q. Generally speaking, would that be the holder cost to the Consolidated of all the gas which it sells, in the aggregate?

A. Yes, sir.

Q. The average holder cost?

A. Yes, sir.

Q. Both that manufactured by itself and by other companies?

A. Yes, sir.

Q. Which it sends out, of course?

A. Yes, sir.

Q. About four-fifths of the way down the sheet marked Complainant's Exhibit 93, I observe the item "Contingent expense and depreciation." Does that represent contingent or reserve amounts or a contingent or reserve amount entirely, or does it include certain replacements and renewals actually made?

A. The statement covers the twelve months ending Oc-
547 tober 31, 1905. For the two months of 1904, that is to say, November and December, 1904, there were actual expenditures——

By Mr. PAGE:

Q. You mean ten months, don't you?

A. For two months of 1904.

Q. But it is ten months of 1905?

A. Well, I am speaking now of two months of 1904. During the two months of 1904 there was expended for replacements and renewals in distributing apparatus the sum of $35,990.11. The balance of that $1,114,236.38 accrued during the ten months of 1905 and was estimated upon the sales on the basis of ten cents a thousand cubic feet.

By Mr. MATHEWSON:

Q. During the ten months ending October 31, 1905, how much was actually expended which is ultimately charged into this account?

A. $107,104.40 was actually expended during the ten months.

Q. So that the $1,114,236.38 would include actual expenditures to the amount of the two amounts which you have just named, and which together aggregate what?

A. Before giving that total I would like to draw your attention to another item of actual replacements which occurred during two months.

Q. I understand, but I am now dealing with this $1,114,236.38?

A. $143,134.51.

Q. Can you tell whether the expenditures for repairs and replacements in this nominal year were up to the average of the preceding twenty years?

A. No, they were not.

Q. Were they less or more?

A. Considerably less; less than half of what it cost us in preceding years.

548 Q. Have you any material at hand from which you can state what the average repairs and renewals for twenty years are, which appear in your expenditures for the nominal year to October 31, 1905?

A. I have not those figures before me at the moment, but I can prepare such a statement.

Q. I wish you would make a note of it. I see near the end of the statement the item, "fixed charges, $936,883.24." What does that represent?

A. That is interest on the company's obligations accruing during the nominal year, net.

Q. What do you mean by "net?"

A. That is to say, from the interest the company had to pay was deducted any interest received on any temporary investments and loans existing during that period.

Q. Take the outstanding debentures of July 1, 1904, for example, which are a little less than twenty million dollars. In reaching this figure did you deduct from the amount which the company is obliged to pay on those debentures, in the way of interest, any amount which the company receives from investments that it has while it holds them?

A. Yes.

Q. Such as city and Government bonds?
A. Yes.
Q. Then that is a net, and not a gross charge?
A. That is the case.
The MASTER: How can it be a fixed charge in the ordinary acceptation of the term?
Mr. MATHEWSON: It really is not; it is less than the fixed charge as a matter of fact, but as these moneys are drawn into the Astoria improvement, as they are being turned all the time, the fixed charge rises nearer to what you would say was a fixed charge; but the allowance is made here because it was thought proper to credit the amount received from temporary investments upon what would really be a fixed charge, thereby reducing by so much the charge.

549 Mr. GANS: May I ask what other items of so-called fixed charges there are besides the interest on these debenture bonds?

Q. Are there any other items of fixed charges than the interest on debenture bonds of July 1st, 1904, and those old debenture bonds of 1888, which you said were outstanding to the extent of $1,000,000 and over?
A. I believe that covers all interest charges which the company had to pay during that period.
Mr. GANS: At what rate were those old debenture bonds?
Q. What was the rate of those old debenture bonds?
A. Five per cent.
Q. At the foot of this statement appears a statement of gas mains built by the Consolidated Gas Company and by other companies under the agency agreements, does it not?
A. Yes.

Mr. MATHEWSON: That is all I have to ask. I am informed that the original papers in place of these printed copies can be available within a half or three-quarters of an hour, but they may not all be here when they do come, so I do not think it best to enter upon that to-day.
Mr. PAGE: I understand that you have completed your examination now of Mr. Carter?
Mr. MATHEWSON: Yes, for the present. I shall offer those other papers when they come; there are some minor matters which I desire to ask him on later, but he has not the material yet.

Cross-examination by Mr. PAGE:

550 Q. As Secretary of the Consolidated Gas Company you have charge of the accounting department of the company?
A. Yes, sir.
Q. You have referred to a general ledger. What other ledgers are kept in your department besides the general ledger?
A. The operating ledger.
Q. Anything else in the way of ledgers?
A. No other ledgers.
Q. Is there a ledger of consumers' accounts?

A. Not considered as general office records; we have a great many consumers' ledgers; several hundred of them.

Q. You have consumers' ledgers at each branch of the company; is that right?

A. Yes.

Q. At each branch office?

A. Yes.

Q. How are those brought into the general books of the company at the central office, and into what ledger are they entered?

A. They are brought in through reports from the branch offices of gas sales for the month, as they are made up from the consumers' accounts, and those reports form the basis of the entries which are made in the general books, by which the consumers are charged with the amount of the bills rendered them for gas supplied, and the gas sales account is credited.

Q. In your department the item is brought in as gas sales at such a branch? They are not segregated as against the particular consumers?

A. No, decidedly; it is the aggregate sales at each branch.

Q. And into what particular ledger is that entry posted in your general books?

A. It is posted both in an operating ledger and in the general ledger. The operating ledger would show the sales by the branch offices, and the general ledger would show it in one amount.

Q. Just what accounts are carried into the operating ledger?

A. All of the accounts that the company has, practically, are in the operating ledger. I might explain that the difference be-

551 tween the operating ledger and the general ledger is that in the operating ledger we separate all our operations between the different branches and stations. In the general ledger they are shown in aggregates. The operating ledger is simply an elaboration of what appears in the general ledger.

Q. In other words, the general ledger is a condensation of what appears in the operating ledger?

A. Put it either way.

Q. I suppose that you post the same details and then from that post the condensed form, rather than post in the condensed form and extend it into details?

A. The first entries are made in the operating ledger.

Q. That is just what I mean. Would the operating ledger contain the details of all the accounts that appear in the general ledger?

A. Yes. I might make an exception of some assets and liabilities that are grouped in the operating ledger under a single heading, and that appears in greater detail on the general ledger.

Q. By what method do you transfer your accounts from the operating ledger to the general ledger? Do you journalize them, I mean?

A. By journal entry, the journal entry being made up from a statement taken off from the operating ledger.

Q. What are the bases of entries in the operating ledger, in your department?

A. Entries in the operating ledger would arise from reports of

the employment of material or from vouchers indicating the disbursement of funds.

Q. And from what sources do you receive those vouchers?

A. Vouchers indicating the employment of material come from every department, or offices, shops, street departments and stations, gas making stations. The vouchers for the disbursement of funds would come from the cash department after the checks had been drawn.

552 Q. What other records do you keep as to the details of manufacture of gas, beside the operating ledger?

A. Such statements as were exhibited before the Gas Commission.

Q. You refer by that to station records?

—. Station records and general office records of the receipt and employment of material at the different stations.

Q. How often do you receive those reports from these stations?

A. The stations make daily reports of their operations in detail.

Q. Into what book are those daily reports first entered, after being received from the stations?

A. A record is kept in the engineering department of the general office.

Q. And what is the particular title of that book?

A. I am not sure that it has a title, but if I were to give it one I would call it a station record.

Q. A station record of what?

A. Of operations.

Q. Into what account do you enter the record of gas made?

A. The record of gas made is included in the daily report that the station makes, which is sent to the engineering department, and entered into a record to which reference has been made, and aggregated at the end of the month, for the purpose of ascertaining the quantity manufactured each month.

Q. That is not carried into the operating ledger in any way, is it?

A. What, of gas made?

Q. Yes.

A. No, I do not think that it is; in fact I am quite sure that it is not, in quantity.

Q. Into what book are entered the items of gas sold, as reported by the various branches and the general office?

A. The quantity would be a matter of record in a small book kept for the purpose. Both quantity and amount would be shown in the journal every month, and posted in the operating ledger.

553 Q. Then the gross amount of gas sold is posted to some ledger account?

A. Yes.

Q. But the total of gas made is not?

A. Not the quantity; the cost would be.

Q. Is the cost carried in as a gross amount of so much gas made at such a cost?

A. Decidedly not; the cost would be made up from the records that have been referred to as kept in the engineering department, showing quantities of the various materials employed in manu-

facture, and the labor would be entered from the pay rolls themselves.

Q. As I understand, the reports from the various stations contain the details of the number of days of labor and the amount of material used, but are not carried out in the value of such expenses in dollars and cents; is that right?

A. The daily report you are referring to?

Q. The report that comes from the stations?

A. There is but one report, and that is a daily report and they would enter on there probably the number of days of labor employed at a station, every day, purely for statistical information; it would have no reference to the cost of gas whatever, and would not be used in any way.

Q. And is that the same in regard to the amount of materials used?

A. The amount of materials that are reported as used daily would be entered in the general office record, would be aggregated at the end of the month, and the quantity, at the average prices at which it stands upon the books as stock, would be charged to the manufacturing account and credited to the stock account.

Q. Is not, somewhere in the process of the keeping of these accounts, the labor treated in the same way?

A. The labor, as I have explained, appears in detail in the weekly pay rolls, which are in the nature of cash disbursements and dealt with as such.

554 Q. And when you deal with it, the labor, to what account do you carry it?

A. The labor is charged, Senator, to whatever account the pay roll indicates the labor was engaged in. The pay rolls are divided so as to show the labor in the retort house, the purifying house, the generator house, or repairing apparatus, or repairing buildings, handling stock or handling coke, and accordingly as the pay rolls indicate the nature of the labor, it is charged up in the operating ledger.

Q. The value of the materials used and the cost of labor are ascertained and computed in the accounting department, are they not?

A. Yes, sir.

Q. And the books in the engineering department would not show the cost either of material or the cost of labor?

A. No, they would not.

Q. Now, I suppose there are some general accounts in the general ledger that would not appear in the operating ledger, are there not?

A. No, as I have already explained, the operating ledger and the general ledger are identical, with this difference; that there are many accounts on the general ledger that in the operating ledger appear in much greater detail, showing the division of the accounts between the various branches and stations, and there are a few accounts upon the general ledger which appear in one combined account in the operating ledger.

Q. To what account in your operating ledger would you carry the income from dividends on stocks owned by the Consolidated Gas Company?

A. In the operating ledger.

Q. Yes.

A. It would appear in an account that would plainly indicate what it was.

Q. Not having the account before us, and not being able otherwise to find out, except from you, would you state what you call that account?

A. It would depend upon what item of income you have reference to.

555 Q. I said, dividends on stocks owned by the Consolidated Gas Company?

A. Which particular stocks?

Q. Take the Standard or the Mutual, for instance?

A. It would be a dividend on Standard stock or a dividend on Mutual stock.

Q. And that would be posted in the operating ledger, would it?

A. Yes.

Q. And how would that appear in the general ledger?

A. In precisely the same way.

Q. Then, as I understand it, the general ledger is a mere condensed operating ledger; is that right?

A. No, I should not call it a mere condensed operating ledger. I should call it what it is, a general ledger; the operating ledger is quite a different kind of book.

Q. Well, if the accounts are the same, and the entries are the same, except that the general ledger is the operating account condensed and several accounts brought into one, how are they entirely different books?

A. As I have explained, they only differ in respect to the degree to which the details of the accounts are shown.

Q. Does your plant and property account appear in the operating ledger?

A. Yes.

Q. And your main and service account?

A. In the operating ledger, in detail, not only as to the mains account—well, that is, in the case of mains, one account; in the case of property accounts, it would be divided between the stations or branches or departments, as the case might be.

Q. Is there a separate account on your books for mains and services?

A. A separate account for mains and a separate account for services, yes, sir.

Q. Are there two accounts of that kept, one in the operating ledger and one in the general ledger?

A. They are identical in each ledger.

556 Q. When you take a trial balance, from which ledger do you take it?

A. Both ledgers are balanced.

Q. That is, a trial balance is struck each month from each ledger?

A. Yes, sir.

Q. I understand, however, that at no time in the last twenty-two years has there been taken an inventory of your property?

A. What property do you refer to?

Q. Property of the Consolidated Gas Company?

A. I cannot reply affirmatively to that proposition, because I know there is property that is inventoried every year.

Q. What property is it that is inventoried every year?

A. We inventory the material and supplies; we inventory the pipe and specials; we inventory the stove stock every month. We inventory horses, wagons and harness.

Q. Every month you take such an inventory?

A. Once a year for horses, wagons and harness.

Q. Once a year for horses, wagons and harness and once a month for materials?

A. No, for stoves.

Q. How often for materials?

A. Once a year.

Q. Pipes and specials?

A. Once a year.

Q. Then you do inventory everything once a year except the manufacturing plant, mains and services, practically; is that right?

A. Well, I would not say that those six items comprise all our property, Senator. I have named four things that we inventory every year. There are other things that we do not inventory besides mains, services and plants.

Q. Then you do not rely entirely on the entries in your books for those details, but you do take an inventory; is that right?

A. We do in the case of stoves, to establish the fact that the stock is properly looked after and accounted for. In the case of materials
557 or supplies, which deal largely with wrought iron pipe, malleable fittings, meter cocks, stove cocks, and brass goods and materials at various branches and stations, that are inventoried every year to note any changes that may have taken place during the year, that would indicate that property of that kind had decreased or increased. As we buy that material it is charged to the operating account; we do not charge it to stock account, nor do we note its employment for any particular purpose. The purpose of the inventory is simply to see that we are getting into the year's expenses neither more nor less than belong there.

Q. As far as your oil and coal are concerned, is there any inventory of that or is that amount on hand estimated from the amount purchased, less what has been charged as used during the year?

A. We do not call it an estimate. We assume that we have on hand all that our records indicate, of stock of that character.

Q. Well, change it to assumption if you like that better than estimate. You assume to have all on hand that has been received less what has been used?

A. That is the case.

Q. And plus what was on hand at the beginning of the year?

A. That is the case.

Q. Then, when you state the value of materials on hand, it is a result arrived at in the method which you now state, is it?

A. Yes, sir.

Q. Now, will you tell me just exactly how you keep your mains and services account, where the mileage and footage is kept, and the other details in regard to it?

A. The mileage is kept in the mains and services department under Mr. Simpson's supervision, in records provided for the purpose. The value of the mains is a matter of record of the general books, and varies accordingly as mains are extended or as mains of a larger size are laid in place of those in the ground.

558 Q. Is there any record in your department of the number of miles or the number of feet of mains that are in use by the company? I mean in the accounting department?

A. No, there is none; not what I should call a record. We may inform ourselves occasionally, and I have no doubt that I have memoranda in my desk of the mileage of mains for every year from the consolidation to date; but the records in which the changes of mileage of mains are noted at first hand—and which therefore is the most desirable record, for anything else would be nothing but a copy of it or a reproduction of it—are kept in the mains and service department, which is one floor above the floor on which my office is located, and which I consider is as much in my department as any other record could be.

Q. Well, I suppose as secretary of the company in that position, all of the records of the company are in a measure under your department, but as head of the accounting department, as distinguished from the engineering department, is what I refer to.

A. We endeavor to avoid duplication of record as much as possible Senator, on the theory that they are extravagant and lead to error.

Q. Then the mileage of mains is kept in what would be called the street department?

A. Yes, sir; in the street department.

Q. And the value of mains is kept in your or the accounting department?

A. Yes, sir.

Q. Are the various items that enter into the mains account in your department carried in as so many feet of such a sized main and such a price?

A. Are you referring now to an extension of the system, a new main, for example?

Q. Yes.

A. The cost of a new main would reach the accounting department through a monthly report made by the street department, indicating the employment of material which would be necessary for that new main, as to the material, and would reach the accounting department through the pay roll as to the cost of the labor of laying it.

559

Q. Will you name the various sources of income that would enter upon the books of the Consolidated Gas Company?

A. Principally from the sales of gas; also from——

Q. And that account is carried into a separate account?

A. Separate account called Gas Sales Account, an income account.

Q. And I suppose that is now footed year by year, appears on the books from year to year?

A. Yes, sir; appears on the books from year to year.

Q. And what other sources of income?

A. The rental of appliances is the source of some revenue.

Q. And that is carried into what account?

A. The stove rental account, an income account.

Q. And that is now stated on the books of the company from year to year, is it?

A. Yes, sir.

Q. And what other income?

A. Income from securities owned which would appear under the title of the companies from which the income was received, as an income account.

Q. Then there is no general account of income of securities owned, to which all this would be brought together, all these separate accounts?

A. They are also separately.

Q. They are also separately but is there a general account into which they would be posted?

A. They would be posted into profit and loss account at the end of each year.

Q. Yes, as a general item, but I mean is there any account posted to that particular class of income?

A. No, Senator, they are not so numerous as to render it necessary to group them.

Q. Is there any other source of income to the Consolidated Gas Company?

A. The company receives some revenue from the sales of
560 residual products which, however, is not treated as an income or shown as an income account but as you are aware appears in our cost sheet as reducing the cost of manufacturing gas.

Q. Well that would be all, would it?

A. I don't recall anything else at the moment. We might and we do have some small revenue from the rental of property that we own; it is not a considerable amount.

Q. That would appear in what account?

A. Rent account, an income account.

Q. You say rent account and income account?

A. An income account.

Q. Could you without great difficulty prepare a statement showing the income from your gas sales and your income from other sources year by year since November 11th, 1884, for the calendar year except to October 31st, 1905—for the calendar year, in all years except 1884 and 1905?

A. I do not like to say I can do it without a great deal of trouble, but there is nothing impossible under the sun.

Q. Well it would be of no more trouble and not as much as it was to make up some other exhibits that you have produced here, would it?

A. Well, all of us think that the next one is the hardest of all.

Mr. MATHEWSON: Some of those took several weeks to prepare.

The WITNESS: Some of them involved a great deal of trouble. I don't think any of them would involve as much as the one you suggest, but I have no objection personally to making it.

Q. You say that each year has been carried out separately so that the total for each year is entered in the accounts?

A. Yes.

Q. So it would merely be copying one entry for each of the years?

A. Do I understand you want it in one amount?

561 Q. No, I want the separate amounts, I want the income from the gas sales stated each year and the income from each of the other sources; not necessarily that you should set out what you receive from each company in the way of dividends.

Mr. GANS: You can take that off of the balance sheet for each year in about five minutes, can't you?

The WITNESS: Always assuming that things were as carefully separated years ago as they have been kept latterly.

Q. From 1884 to 1900 you did not own stocks in other companies, did you?

A. So far as that particular detail is concerned I am not at all worried, but income from other sources—not from other sources but from what you might term miscellaneous sources, such as stove rentals and real estate rentals, income of that kind, it might be a little trouble; still I am not begging off from the proposition; if counsel approves of my making up such a statement I shall be very glad to do it.

Mr. PAGE: Does counsel approve?

Mr. MATHEWSON: Counsel does not quite see the pertinence of a statement of that kind covering twenty years, Senator. I do not say that counsel will decline outright but I think it is rather extreme.

Mr. GANS: In order to get this record straight we might ask now to have the general ledgers of the company for those years brought down at the next hearing and that the Master direct that those ledgers be brought down.

Mr. MATHEWSON: I do not think that that would meet the case if we determined to make objection to it because if the ledgers were here the same objections would lie to going into that subject

562 in the ledgers back in 1885 and 1886 that would be with the statements. We do not wish to give you trouble——

Mr. GANS: Yes, I understand, but that would give us a situation where we could keep the records straight, having made our request and having it ruled upon.

Mr. MATHEWSON: I will confer with the officers and see how much work it will be to prepare such a statement.

Senator PAGE: That is as far as I care to proceed to-day.

The WITNESS: There are several corrections that I wish to make in my testimony. They are as follows: On page 472 "I can't say positively" should be "I can say positively."

Page 477, "if that is the case" should be "that is the case."

Page 481, "sold to cover" should be "issued to retire."

Same page, "no books would show whether" should be "no books would show," striking out the "whether."

Page 487, "add to this inquiry, or even add to the capitalization of 1884" should be "aid this inquiry or affect the capitalization," &c.

Page 516, "from what sources" in place of "want of sources."

Page 527, "United Electric Light & Power Company" instead of "New York Electric Light & Power Company."

Page 529, "as acquired" instead of "required."

Page 530, "normally" instead of "nominally."

Page 536, "might appear in the record" instead of "may appear in the record."

Page 538, "accounting department" instead of "extending department."

563 & 564 Page 539, "and new construction" instead of "or new construction."

At 4:00 o'clock P. M. adjourned to Monday, August 6th, 1906, at 11 o'clock A. M.

Last Exhibits:

Complainant's 93.
State's A.
City's 1.

565 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, MONDAY, *August* 6, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Mead, Mr. Gans, Mr. Burr, Mr. Taylor.

At the request of Mr. Gans, on account of the absence of Senator Page, adjourned until tomorrow, Tuesday, August 7, 1906, at 11 o'clock A. M.

566 NEW YORK, TUESDAY, *August* 7, 1906—11 o'clock a. m.

Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

Mr. MATHEWSON: Before you proceed, Senator Page, would you mind my putting in two or three papers that were in course of prep-

aration at the last hearing but which the witness had not completed? Your cross-examination may deal with them.

Mr. PAGE: Certainly.

ROBERT A. CARTER further examined:

Redirect examination by Mr. MATHEWSON:

Q. Have you prepared a summary of operations of the company for the calendar year 1905?

A. Yes.

Q. And that is the last calendar year for which the company is operating?

A. Yes.

Q. At what time are your books closed, as to general accounts?

A. Fiscal year? On the 31st of December.

Q. The 31st of December, calendar year?

A. Yes.

Mr. MATHEWSON: I offer in evidence the statement to which Mr. Carter has referred.

Mr. GANS: We make the same objection as was made to all
567 offers in evidence of this character, as not the best evidence, and that if received it must be received subject to our right to examine the books of the company themselves, and to cross-examine at such length as we may desire, to ascertain the accuracy of the statements.

Mr. BURR: We make the same objection.

The MASTER: The same ruling.

Exceptions taken by Mr. Burr and Mr. Gans.

Received in evidence and marked Complainant's Exhibit 94.

Q. Referring to Exhibit 93, "Summary of Operations of the Company for the Calendar Year ending October 31, 1905," I asked you a question regarding the meaning of certain of the headings contained in Exhibit No. 93. Do the same explanations apply to the headings in this list, Exhibit No. 94, the corresponding items?

A. Precisely, yes, sir.

Q. I see here an item in Exhibit No. 94, "Contingent Expenses (includes renewals)," $1,328,316.37, which appears to be 10 cents per thousand on gas sold. Will you state how much of that item represents actual renewals, as distinguished from the contingent or reserve fund?

Mr. GANS: We make the same objection that we have heretofore made in regard to the introduction of other papers, as to the witness testifying from papers in regard to facts of this character.

Mr. BURR: The same objection.

The same ruling and exceptions.

A. The expenditures for renewals and replacements during the calendar year 1905 amounted to $282,219.67, or 2.12 cents per thousand cubic feet sold during that period.

568 Q. Does the word "renewals" as it is used in this Exhibit No. 94 include what you call renewals and replacements?

A. That is the case, yes, sir.

Q. Will you state what figures in Exhibit No. 94 are in red ink, and what the significance of the red ink is?

A. The red ink indicates that the balance in that particular operating account for the period was a credit balance and operated to reduce expenses in the aggregate.

Q. State what they are?

A. Profit and loss adjustment under station expense, $7,508.39. Profit and loss adjustment under distributing expense $29,683.92.

Q. And the figures at the right of those which you have just mentioned in the first instance are profit and loss adjustments. 7/100ths of a cent in the last column, and in the next to the last column; and after profit and loss adjustments, below, 00.22 in the final column; they are also in red ink?

A. Yes.

Q. And they have the same significance?

A. Yes, it was a credit balance and operated to reduce station expense or the expense of the distribution of gas, per thousand cubic feet of gas sold or made, as the case may be.

Q. Can you state what the average of replacements and repairs per thousand cubic feet were from the time of the formation of the company up to January, 1905?

Mr. GANS: I object to that on the same grounds as heretofore; it is evident that the witness can testify to that only from the books of the company, and that the books of the company should be produced.

MR. BURR: The same objection.

Objection overruled; exception taken by Mr. Gans and Mr. Burr.

569 Mr. GANS: May we ask the question, in order to make the record clear?

The MASTER: Yes.

By Mr. GANS:

Q. You cannot testify to that except from the books of the company, can you?

A. I am very familiar with the figures; I made them up on two previous occasions.

Q. But you made them from the books of the company?

A. They were made from the books of the company.

Q. And you have no independent knowledge, except that derived from the books of the company, at one time or another?

A. Certainly not; the information is derived absolutely from the books of the company.

By Mr. MATHEWSON:

Q. And to be absolutely exact, you would have to go to the books of the company?

A. I should simply confirm my memory in this particular case; the figures have been used so often that I am perfectly familiar with them.

By Mr. GANS:

Q. You made them originally from the books of the company?
A. I made them originally from the books of the company.

Mr. GANS: I press my objection. I suppose there is the same ruling and exception?
The MASTER: Yes.

Mr. MATHEWSON: Now, will you state.
The WITNESS: The expenditures for repairs and replacements during the period from 1884 to 1904, inclusive, amounted to
570 10 89/1000 of a cent per thousand cubic feet of gas sold.
Q. Whenever you use the word "renewals" you mean renewals and displacements?
A. That is the case.
Q. And wherever you use the word "replacements," you mean renewals and replacements?
A. That is the case.
Q. In other words, the terms are interchangeable whenever you use them?
A. Precisely so.
Q. And as they are used in the exhibits which you have prepared?
A. That is the case.
Q. Please state what the repairs and renewals amount to for the nominal year ending October 31, 1905, actually expended?

The same objections, ruling and exceptions.

A. Six and sixty-one hundredths of a cent.
Q. How much is that less than the average of the previous period of the company's operations?
A. 4.28 cents.
Q. How much were the repairs and renewals, actually made by the company, for the calendar year of 1905, per thousand cubic feet sold?

Mr. GANS: Of course I understand this is all taken subject to our objection.
The MASTER: Yes, the same ruling and exception.

A. 7.34 cents.
Q. How much is that less than the average of the company from its organization up to January 1, 1905?
A. 3.55 cents.
Q. Have you prepared a statement of the income and expenses of the company for the nominal year ending October 31, 1905?
A. Yes.
Q. Is this the paper?
A. Yes, sir.

571 Mr. MATHEWSON: I offer it in evidence.
Mr. GANS: The same objection as heretofore.
Mr. BURR: The same objection.
Objections overruled; exception taken by Mr. Gans and Mr. Burr.

The paper is received in evidence and marked Complainant's Exhibit No. 95.

Q. Have you also prepared a similar statement of the income and expenses of the company for the calendar year 1905?
A. Yes.
Q. Is this it?
A. Yes, sir.

Mr. MATHEWSON: I offer it in evidence.
The same objections, ruling and exception.
The paper is received in evidence and marked Complainant's Exhibit No. 96.

Recross-examination by Mr. PAGE:

Q. Prior to the consolidation you were connected with the New York Gas Light Company?
A. Yes, sir.
Q. What was your position in that company, prior to the consolidation?
A. Bookkeeper.
Q. And what was your first position under the Consolidated Gas Company?
A. In the stock transfer department.
Q. You did not become the general accountant or bookkeeper of that company then, immediately?
A. No, sir.
Q. And you did not open the books of the Consolidated Gas Company?
A. No, sir.
Q. The amount of capital stock that was first issued by the Consolidated Gas Company, as you have testified, was $39,078,000?
A. Rather authorized than issued, I should say; it was not all issued at that time.
572 Q. How much was reserved?
A. I should like to refresh my memory by my previous testimony on that subject, or I may have some memoranda. I will see.
Mr. PAGE: I think you will find it at page 392. (Hands minutes to the witness.)
The WITNESS: There was reserved as working capital $1,303,000.
Q. That was the reserve as working capital?
A. Yes, sir.
Q. The consolidation agreement provided for a reserve of $1,500,000. Now, was a reserve made of $1,500,000, or was it this reserve of $1,303,000, which makes the difference between the addition of the $29,994,000 and $7,781,000, which was the appraisal of the property and the franchise and rights added together?
A. My understanding is that the value of the assets of the old companies, as appraised in 1884, tangible and intangible, aggregated $37,775,000. How the working capital *capital* was arrived at I am not quite sure in my mind.

Q. Was that figure of $1,303,000 that you arrived at by a deduction of the total that I have specified from the $39,078,000, or is it something based on entries in the books of the company?

A. No, it was actually reserved as working capital and so shown in the original books of the company. I think possibly the consolidation agreement originally included some of the companies which did not finally go into the consolidation. The probability is that that fact would explain the difference in the amount to be reserved for working capital.

Q. You refer then to the Mutual Gas Light Company?

A. Yes.

Q. Which was mentioned as a party to the consolidation agreement, but did not become a party?

A. That is the case.

573 Q. And your idea is that this $1,500,000.00 was scaled down to meet that condition?

A. That is the case, that is my understanding of it.

Q. You stated at page 392 that there was issued at the time of the consolidation $35,430,060.00 of capital stock. How much was reserved under the terms of the consolidation agreement to pay off the outstanding indebtedness of the consolidating companies?

A. $2,329,000.00.

Q. Was that the outstanding indebtedness?

A. That was the outstanding indebtedness of the consolidating companies.

Q. I show you a statement on page 10 of Senate document No. 30, being the report of the Joint Committee of the Senate and Assembly, as to the statement of the stock outstanding and indebtedness assumed, and ask you whether that is correct?

Mr. MATHEWSON: Is that of the six constituent companies, Senator?

Mr. PAGE: Yes.

Mr. MATHEWSON: I make the same objection to that question that I did to the previous question, that the Statutes of 1884 defined the basis of the consolidation and the then value of the franchises and rights of the companies and previous capitalization of the previous companies or even the cost of the constituent companies' properties is not material.

The MASTER: He may answer.

Exception.

A. Will you kindly indicate what figures you have reference to in this document?

Q. The table at the top of the page.

A. There is a statement at the top of the page in which there purports to be given the indebtedness assumed by the Con-

574 solidated Company of several companies given in the statement, including the Knickerbocker Gas Light Company. My understanding is that the debts of that company were not included. However, I am by no means sure about that.

Mr. MATHEWSON: Will this paper refresh your Memory at all? I don't know what you have in mind.

The WITNESS: I don't know anything about the figures in this statement, Senator. I am unable to confirm them or testify in regard to them at all. I don't know where they were procured from. I know that no such indebtedness as given in this statement was assumed by the Consolidated Company at the time of consolidation.

Q. The books of the Consolidated Company show the outstanding indebtedness of the constituent companies that was assumed?

A. Yes, any indebtedness of the Consolidating Companies would show if such indebtedness was assumed by the Consolidated Company.

Q. Now, the question is whether it does show, that is the question, without any ifs or buts.

A. There may have been some debts of the old companies which were a matter of cash adjustment as between the Consolidated Company and the old companies but for which no securities were issued by the Consolidating Companies comprised in the consolidation, I am not prepared to say. There may have been. If there were any such debts they were charged against the Consolidating Companies and paid by them.

Q. Well, but the consolidating companies went out of existence, did they not, as soon as the consolidated company was formed?

A. As companies, yes. I would not like to testify from
575 my memory just what the transactions may have been in connection with other obligations of the old companies, and those which were covered by the stock issued on the Consolidated Gas Company. If there were any such, why, they are a matter of record.

Q. And the books of the company would show?

A. Would show.

Q. That is, the books of the Consolidated Company?

A. They would, because the Consolidated Company took them over and they would indicate the method by which they were settled.

Q. What particular book of the company would show that?

A. The journal and the ledger.

Q. For the year 1884?

A. For the year 1884.

Mr. PAGE: I would like to have the journal and ledger of 1884 that would show the account, that the witness has just testified to, produced.

Mr. GANS: Mr. Mathewson sits mute. Will the Master direct the production of those books?

The MASTER: Any objection, Mr. Mathewson?

Mr. MATHEWSON: I do not think there is any objection to producing the book, to show how the account was opened to which the witness has testified. I shall ask the witness to produce it for the purpose of your cross-examination, but I think the witness could probably inform himself in a moment so he could make it perfectly clear, and perhaps you would like to have him do so.

Mr. GANS: He may do that and then if we do not need the books we may dispense with it.

Mr. MATHEWSON: I think it is very simple.

The WITNESS: I will undertake to do that then and cover the questions asked by the Senator in a memorandum.

576 Mr. MATHEWSON: And if it is not clear you may produce the book.

The MASTER: Can you arrange it so as to do that during the recess?

The WITNESS: I think so, if the recess is long enough to give me the time to go up town and back. I think I can do it in an hour and a half probably.

Q. The outstanding capital stock of the constituent companies was as stated at this place in Senate Document No. 30, was it not?

A. May I look at your memorandum again, Mr. Mathewson?

(Paper handed witness.)

Q. They corresponded in amounts?

A. I presume it was, yes, sir.

Mr. MATHEWSON: I wish to make the same objections to this line of questioning, that I have already made to the previous question.

The MASTER: Same ruling.

Exception.

Q. And that was $17,000,000?

A. Yes.

Q. And made up as follows:

Manhattan Gas Light Co.	$4,000,000
New York Gas Light Co.	4,000,000
Metropolitan Gas Light Co.	2,500,000
Municipal Gas Light Co.	3,000,000
Knickerbocker Gas Light Co.	1,500,000
Harlem Gas Light Co.	2,000,000
Total	$17,000,000

Mr. GARVER: You read that from the Senate Report referred to?

Mr. PAGE: Yes, page 10.

577 Q. That is correct as to details, is it?

A. Yes, sir.

Q. The cost of the properties held by the constituent companies was shown on the books of those companies, was it not?

Mr. MATHEWSON: I object to that, Mr. Master, as a conclusion and upon the same ground, too, that I have objected to the previous questions.

Mr. PAGE: The form of question may be objectionable. I will ask whether it was shown——

Mr. MATHEWSON: I will ask if the witness has any knowledge on the subject.

Q. I will ask whether the cost of the constituent companies was shown upon the books of those companies'

Mr. MATHEWSON: I will ask the witness whether he has any knowledge as to whether any figures on the books of the constituent companies showed actual cost or not.

The WITNESS: I have no knowledge that they did show actual cost, and I have every reason to believe that they did not show actual cost.

Q. Then you have some information upon the subject. I suppose you have examined those books?

A. In a casual way.

Q. You are very familiar of course with the books of the New York Gas Light Company?

A. Not particularly.

Q. You were bookkeeper of that company, were you not?

A. Not the general bookkeeper; I was keeping the consumers' accounts at that time.

Q. Have you the books of the constituent companies in your possession?

578 A. I could not put my hands on them at once, but I have no doubt they could be found; I have not had occasion to refer to them in a great many years, but I have no doubt they are very securely locked up somewhere, and I could find them if you desired.

Q. Well, you know, do you not, that the cost shown or ostensibly shown of the constituent companies was put in evidence before the Investigating Committee appointed by the Senate by resolution of May 15, 1885?

Mr. MATHEWSON: I object to that on the same grounds as previously stated, and the witness having no knowledge.

The MASTER: I will allow it.

Exception.

(Question read.)

Mr. MATHEWSON: Do you mean from any books of ours or of the six constituent companies?

Mr. PAGE: Well, it was stated on page 11 that it appeared from the evidence taken before the Investigating Committee, etc.

Mr. MATHEWSON: Do you refer to the committee which reported in 1886? There were two committees.

Mr. PAGE: Yes, I suppose so. It was appointed in 1885.

Mr. MATHEWSON: And it reported in 1886.

Mr. PAGE: To save time, would you be willing that that should be put in subject to your objection?

Mr. MATHEWSON: As to the cost of the six constituent companies?

Mr. PAGE: Yes.

Mr. MATHEWSON: No, I would not. If I believed it to

579 be, I would not hesitate a moment, but I do not. Some figures on the books of the constituent companies may have aggregated those figures, but that those figures represented the actual cost of the constituent companies or were the actual cost, is not my information. That is the reason I do not feel free to consent to it.

Q. Now, of the first increase of capital stock of the Consolidated

Gas Company to $54,595,200, all went to the retiring of the debentures which were issued to purchase the stock of the New York Gas and Electric Light, Heat & Power Company?

A. Yes, sir.

Q. Now as to the second increase of $25,204,800 to bring the capital stock up to $80,000,000, $3,773,600 issued to retire the debentures which had been used in the purchase of the New Amsterdam stock, was there not?

A. Yes, sir.

Q. Did you subsequently buy more New Amsterdam stock?

A. We did, yes, sir.

Q. And can you state when?

A. Well, at various times, small amounts comparatively. I do not think we have made a purchase for a year or two.

Q. Can you state the aggregate amount of New Amsterdam stock that the company has purchased or holds?

A. Yes, sir, do you want it in shares, common and preferred and scrip? We hold of the preferred stock $8,991,475 par value, and of the common stock, $12,154,592.50 par value.

Q. At what value are those carried on the books of the company?

A. The memorandum is being prepared, Senator, for Mr. Burr, that gives that detail, and I do not happen to have it. It is coming down by messenger, and when it is here, I can answer the question very readily.

Q. Is it carried on the books of the company as the amount
580 that it has cost the company either in stock or cash?

A. It stands on the books at the par value of the stock that was issued and exchanged for part of it, and at the cash cost of the balance.

Mr. MATHEWSON: It was not carried into the books at an amount equal to the par of the stock of the Consolidated, plus the premium at which it was issued.

The WITNESS: No, the book value does not include any of the premium of the stock that was issued for it.

Q. That is of the $3,773,600 of stock issued to purchase New Amsterdam, it would be carried on the books of the company at that price, $3,773,600?

A. Yes, sir.

Q. And of the balance, how would that be carried?

A. It would be the amount of cash expended for the balance of stock acquired over that acquired by the issue of stock of the Consolidated Company.

Q. Will the statement which you are going to produce show the amount of the purchase for cash, separate from the other?

A. It would show the total amount of New Amsterdam stock which we hold, and the total cost of it.

Q. There was no other consolidated stock issued for the purchase of New Amsterdam, except this $3,773,600?

A. No other, that is right.

Q. So that whatever the difference would be, was purchased in cash?

A. That is the case exactly, yes, sir.

Q. Then after that issue there was $900,000 sold at 193⅜, was there?

A. $900,000 par value of stock sold, yes, sold for cash.

Q. If my figures are correct, that would amount in cash to $1,740,375.00. Will you verify those figures?

A. 193⅜, was that?

Q. Yes, sir, 193⅜.

A. Yes, that is correct.

581 Q. And the balance of that issue of $20,731,200 was sold to the stockholders of the company at 150, is that right?

A. Yes, sir; at different times.

By Mr. MATHEWSON:

Q. In cash?

A. In cash, to the stockholders, on subscription.

Mr. MATHEWSON: You had better verify that 193⅜.

The WITNESS: I will do so. I simply made a calculation on the figures the Senator gave me, assuming them to be correct.

By Mr. PAGE:

Q. Well, is that statement correct, that the balance of that issue was sold to the stockholders at 150, for cash?

A. Yes, sir, all the rest of the stock was sold to the stockholders at 150.

Q. Then the balance was $20,731,200, and at 150, that produced $31,096,800, according to my figures. Could you verify that?

A. The figures are correct, Senator.

Q. Is there any other stock of the Consolidated Gas Company that has been sold at a premium by the company?

A. You mean sold or issued at a premium?

Mr. MATHEWSON: He means sold for cash or something else, I suppose.

Mr. PAGE: For which the company got a premium in cash, is my idea.

The WITNESS: For which the company got a premium in cash, is that your question?

Q. Yes.

A. None, no, sir.

582 Mr. MATHEWSON: You mean beyond the $39,078,000 of stock originally authorized.

Mr. PAGE: They did not get any premium on that in cash.

Mr. MATHEWSON: I don't know about that.

The WITNESS: I am assuming the Senator only has reference to the sales of stock, for which $39,078,000——

Mr. MATHEWSON: That is of the increased stock.

The WITNESS: Of the increased stock. Between the $35,430,060 originally issued, there were sales at a premium, more or less, up to the $39,078,000.

By Mr. PAGE:

Q. Can you give us the details of those sales?
A. Yes, they could be made up.
Q. That $3,647,940——

Mr. MATHEWSON: Is that the difference between the $35,430,060 and the $39,078,000?
Mr. PAGE: Yes.

By Mr. MATHEWSON:

Q. I understand it to be the case, Mr. Carter, that that stock, or at least some of it, was sold at a premium, above par?
A. Yes, that is the case.

By Mr. PAGE:

Q. How soon could that be gotten up?
A. Why, I think I might be able to get that this noon, Senator, along with the other information.
Q. Did you say you were preparing for Mr. Burr a statement showing the details of the stock of other companies, and
583 stocks and bonds of other companies?
A. Yes.
Q. How soon will that be ready?
A. Probably have that this afternoon also.

At 12:22 P. M., to afford the witness an opportunity to prepare the statements requested, an adjournment is taken to 2 P M. this day.

After Recess.

Cross-examination of ROBERT A. CARTER continued:

Q. Have you been able to prepare any of the statements or gather any of the information which you were to get during the recess?
A. I have not completed my investigations relative to the statement which you questioned me about, but I expect to have the information complete by to-morrow morning.

Mr. MATHEWSON: With respect to the indebtedness of the constituent companies taken over?
A. (Continuing:) With respect to the indebtedness of the constituent companies taken over at the time of consolidation.
Q. Did you find what the treasury stock, if we can so call it, the difference between $39,078,000 and the $35,000,000, was issued for and at what price?
A. It was sold at an average price of $192.40 a share.
Q. That produced how much in cash?
A. $7,019,811.73.
584 Q. The amount of stock so sold was $3,000,000 and how much?
A. $3,647,940, par value.

By Mr. MATHEWSON:

Q. With that amount, would the stock issued to the constituent companies account for the entire $39,078,000 authorized capital?
A. Yes, sir.

By Mr. PAGE:

Q. And that had been all sold and issued up to September 30, 1899?
A. Yes.

Mr. MATHEWSON: All but $100.
The WITNESS: All but $100. Do you want me to make an explanation of the difference?
Mr. MATHEWSON: Yes, of the difference of $100.
The WITNESS: I should say the difference was fractions upon which dividends would not be paid. This is a statement of dividends paid upon the capital stock, but of course the dividends were only paid upon full shares.
Mr. MATHEWSON: The difference of $100 would be represented in outstanding fractions, upon which dividends were not declared?
The WITNESS: Yes.
Mr. GANS: As a matter of fact, stock has been issued?
The WITNESS: Stock had been issued, yes.
Mr. MATHEWSON: To what exhibit are you referring in your answer at this moment?
585 The WITNESS: Complainant's Exhibit 84.

Q. You have stated, have you, all the stock of the Consolidated Gas Company that was sold at a premium, in this amount of $3,647,940 and $900,000, and the $20,731,200?
A. That is all, yes, sir, that was sold at a premium for cash.
Q. That is what I mean?
A. Yes, sir.
Q. Now, were there some debenture bonds that were issued and sold for cash that were not converted into stock?
A. Are you referring to an earlier issue of bonds?
Q. Prior to the issue of the $20,000,000?
A. There were bonds which were not convertible into stock, some of which are still outstanding.
Q. And what was the amount of those bonds or the amount realized?
A. I am not able to say from memory the exact amount of those bonds originally issued; but I think they were issued in 1888 at a premium, and my impression is that a million and a half of those bonds were disposed of. At the present time there is outstanding a balance of $1,387,000.

By Mr. MATHEWSON:

Q. Is that the way it stood on October 31st last also?
A. Yes, sir.
Q. None have been redeemed since?
A. No, none have been redeemed since.

By Mr. GANS:

Q. What was the character of that bond issue, as to the term of the bonds?

A. They were twenty year bonds, expiring in 1908, August 1st, 5 per cent. bonds.

Q. Do you know what premium was realized?

A. I would not like to say from memory; I think $75,000.

586 Q. Can you make sure of that?

A. I can, very easily.

Q. You say some of those have been redeemed. Was that pursuant to a provision of the bond?

A. No, they have been redeemed as they were offered for sale.

Q. And bought in the open market?

A. Bought in the open market by the company.

Q. Can you tell whether by redeeming them you were compelled to pay a premium?

A. In every case.

Q. Can you give us the amount of premium that you paid in redeeming those bonds?

A. Yes, I can furnish a statement of that.

By Mr. PAGE:

Q. Have you a statement of the securities of other companies held by the Consolidated Gas Company?

A. Yes.

Q. And what was paid for them?

A. Yes.

Q. Would you produce it?

Mr. MATHEWSON: What they cost the company in stock of the Consolidated Gas Company, reckoned at par or cash.

The WITNESS: Yes.

Q. In this statement which you have produced, the column marked "total" is the total par of the several securities, is it?

A. Yes.

Q. And the book value is what?

A. The amount paid for the securities in Consolidated stock at par or in cash.

Q. The only stock which you obtained and which was paid for by Consolidated stock is the United Electric Light, Heat & Power Company and the New Amsterdam Gas Company?

A. Not the United Electric Light, Heat & Power Company,

587 but the New York Gas, Electric Light, Heat & Power Company, at present the New York Edison Company, and the New Amsterdam stock.

Q. And the amount of the stock of the New York Electric Light, Heat & Power Company, or the amount that was issued for it, is $15,517,200.00. You carry that on your books as $18,202,969.63 as the stock of the New York Edison Company. Will you explain that difference?

A. The difference represents the amount of divisible surplus earn-

ings of the Edison Electric Light Illuminating Company, to which the Consolidated Gas Company was entitled as holder of the stock of the New York Gas, Electric Heat, Light & Power Company, but which was invested in plant and property by the Electric Light Company, and which the Consolidated Company elected to allow to so remain, charging the cost of the stock with that amount.

Q. That is, there was a consolidation, was there, of some other companies with the New York Gas, Electric Light, Heat & Power Company, or a consolidation of the New York Gas, Electric Light, Heat & Power Company with the Edison Electric Illuminating Company, which became the New York Edison Company?

A. That is the case.

Q. And this increase was the stock that you received of the New York Edison Company, for that $15,517,200 of the New York Gas, Electric Light, Heat & Power Company?

A. Yes.

Q. And therefore does not represent the cash investment of any more than the $15,517,200, does it?

A. Well, we consider that to all intents and purposes, it was an additional investment to that amount, although we did not go through the process of taking the money out of their treasury and advancing it to them again as working capital, but choosing to leave it there as working capital, that amount having been invested
588 in plant and property, and showing in their surplus account a divisible surplus which the Consolidated Company was entitled to, which they disposed of in that manner.

Q. Then, to get at the actual cash transaction with the Consolidated Gas Company, the only cash invested was the $15,517,200, although you assume that that stock that you received of the New York Edison Company, had a value of $3,000,000 more?

A. Yes, approximately.

Q. And you carried it on your books at $3,000,000?

A. Yes, you are perfectly right; it was not a cash transaction, literally.

Mr. MATHEWSON: None of it was a cash transaction.

The WITNESS: None of it was a cash transaction in the case of the Edison Company.

Mr. MATHEWSON: Accounting for the stock at par.

Mr. PAGE: Yes, but there was no additional cash invested to bring that $3,000,000 amount up; so as to make that clear.

Mr. MATHEWSON: Exactly.

Q. Between what period was this additional stock of the New Amsterdam Company acquired by you, to make the amount $4,814,608.03 instead of $3,773,600, which was issued to retire the debenture bonds?

A. I should have to consult the records, Senator, to get the dates. My recollection is that they commenced acquiring New Amsterdam stock in 1900, about May, possibly, and that we discontinued issuing stock in exchange for debentures, I think in 1903, possibly 1904. I should say that the last stock we acquired—the latest date on which

we acquired stock of the New Amsterdam Company—was in 1905, prior to October 31st.

589 Q. And the difference between the $4,814,608.03 and the $3,773,600 would represent the amount of cash that was invested in the purchase of New Amsterdam stock; is that right?

A. Yes.

Q. That is, you purchased stock for which you paid $1,041,008.03?

A. That is correct.

Q. In the purchase of this New Amsterdam stock, as I understand, your debentures were redeemable at $232 of debentures for $100 of stock?

A. In the New Amsterdam?

Q. Yes.

A. No, sir.

Q. I mean in the Light, Heat & Power Company case?

A. Yes, in that case it was at the rate of $232 per share of Consolidated stock issued.

Q. And the debenture was issued at par of debenture for par of stock of the New York Electric Light, Gas, Heat & Power Company?

A. That is the case.

Q. And in the New Amsterdam case, the debentures were issued at $100 of stock to take up $190, as I remember it, of debentures?

A. Of debentures.

Q. Par of debenture was issued for par of New Amsterdam stock?

A. No, New Amsterdam stock was at a rate considerably below par; I do not recall the figures at the moment, but it was not at par.

Mr. MATHEWSON: Was not it at $26 for common and $50 for preferred?

The WITNESS: I would not like to confirm that from my memory, but I know it was something approximating those figures.

Mr. GANS: Can you get that for us?

The WITNESS: I think I can.

590 Q. When did you acquire stock in the New York Mutual Gas Light Company?

A. We have been buying New York Mutual stock in the market for a number of years, dating back I should say as far as 1898 or 1899.

Mr. MATHEWSON: 1899?

The WITNESS: 1899 I think, possibly 1898.

Q. You hold now par value $1,186,200 of New York Mutual, for which you have paid $5,702,290.65?

A. That is the case, yes.

Q. What rate of dividend did that stock pay at the time you purchased it?

A. It has paid, to the best of my recollection, nine per cent. annually.

Q. Of the Standard Gas Light Company you hold $4,096,100 of the preferred, and $4,796,200 of common, and it is carried as having cost the company $14,587,495.23. That represents the cost to you of $8,892,300 for that stock?

A. Yes.

Q. What rate of dividend did that stock pay?

A. Until recently it has been paying at the rate of 6 per cent. per annum on the common and on the preferred. I might add in connection with the Mutual, that that 9 per cent. was paid up to 1905. The rate of 1906 is lower than 9 per cent.

Q. But at the time you purchased it you were paying 9 per cent.?

A. Yes.

Q. You have grouped together the holdings of the United Electric Light & Power Company, of stock preferred and common, mortgage bonds, notes and interest on loan; and the return on the investment is given as $301,648.78. Is any of that dividend on the stock?

A. No, sir.

Q. It is all interest, either on bonds or floating debt?

A. Or floating debt, yes.

Q. Is that the amount of interest that has been paid to the company, or is it merely charged as against the United Electric
591 Light and Power Company?

A. It has been paid up to recently, but owing to the fact that the company is getting no money from the city in payment of their bills, we are obliged to extend credit to them for the amount of that interest at the present time.

By Mr. MATHEWSON:

Q. Is that because you have not furnished light to the city, or because of this controversy, over the amount that you are to receive for it?

A. The light has been furnished; but there is some disinclination on the part of the city—for what reason I am not aware—to settle the bills. A very large part of the company's business is made up of this street lighting.

Q. All of the securities or obligations of other companies that are held by the Consolidated Gas Company, as set forth on this statement, except the Astoria Light, Heat & Power Company, were purchased from the increases of capital stock from the $35,000,000 originally issued up to the $80,000,000, were they? That is, has anything else been purchased out of the $20,000,000 of debentures?

A. This is a statement of securities of a more or less permanent kind; there are other investments of a temporary nature in City stock and in advances to some of the other companies that are not included in here, in which that $20,000,000, some of it, may be temporarily invested.

Q. My question was, though, that none of the stocks or securities upon this statement except those of the Astoria Light, Heat & Power Company were acquired from the $20,000,000 of debentures issued since 1904?

A. That is the case.

Mr. PAGE: I will offer this in evidence.

Received and marked State Exhibit B.

592 Mr. MATHEWSON: I will ask the witness, with your permission, whether the securities owned on October 31st are the same as they stand on this statement?

The WITNESS: With the exception of the Astoria Light, Heat & Power Company, to whom, of course, advances have been made prior to the 30th of June, 1906, the statement with that exception would be the same.

Q. Up to October 31st they would be just the same?
A. Up to October 31st they would be just the same.
Q. Well, you have already testified as to what securities the Astoria Light, Heat & Power Company held on October 31st?
A. Yes, sir.
Q. Besides the securities shown on this statement, have you made loans to the Edison Company and East River Gas Company and any others?
A. Yes, sir, we have.
Q. Are those loans still outstanding?
A. Yes, sir.
Q. And were they made prior to July, 1904?
A. I don't think any of them were made prior to July, 1904.
Q. Well, you loaned to the Edison Company $3,000,000, didn't you?
A. I think approximately that figure.
Q. And was that made out of the moneys received for the $20,000,000 convertible debentures or was it made prior to the issue of those debentures?
A. It was made since the issue and is a part of the $20,000,000, yes, sir.
Q. And the amount that you loaned to the East River Gas Company, which was $496,511?
A. No, I should think not any of that. I don't think that that loan has been augmented much, if any, since July, 1904.
593 Q. That was the amount that you had loaned that company as appeared on your balance sheet of December 31st, 1904, I believe?
A. I have it as October 31st, 1905. If you would like to have the amount as of that date——
Q. Well if it has been changed.
A. It may have been changed.
Mr. MATHEWSON: Was not that a temporary investment in a part of the $20,000,000 debentures?
Mr. PAGE: This he thinks not. This was the money you loaned them to increase their gas plant over there.
The WITNESS: October 31st, 1905, the advances to the East River Gas Company of Long Island City, amounted to $511,397.16; there was a slight increase over the amount as of December 31st, 1904, some $15,000.
Q. Is that $15,000 additional of loan or is it accrued interest?
A. Additional loan or advance.
Q. On December 31st, 1904, you had loaned $842,166.68 to the United Electric Light & Power Company. Was that made prior to July, 1904?
A. I should say most of it was. It represents an amount of—

well you might say offhand—I will say that it accrued mostly prior to July, 1904.

Q. And you had advanced to the Westchester Light Company $302,328.50. Does that investment remain the same?

A. No, that has increased. As of October 31st, 1905, that amounted to $710,000.

Q. The amount as it appearrs on December 31st, 1904, was that made prior to the sale of the debentures, of the $20,000,000?

A. The amount advanced to the Westchester Light Company?

Q. Yes.

A. No, I should say that that was made subsequent to the issuing of the debentures.

594 Q. Well it would be a very easy matter by reference to the books of the company to ascertain exactly whether these various items were advanced prior to the sale of the debenture bonds of $20,000,000 or subsequently, would it not?

A. Yes. I don't think it would signify much, but——

Q. It might not signify much, but——

A. From which standpoint—the advances as of December 31st, 1904, even though they might have been made as of December 31st, 1903, might have represented the employment of certain resources that in turn were converted into convertible bonds so that the convertible bonds might have been the form of resource that ultimately took care of that advance.

Mr. GANS: You mean the convertible bonds took up a part of your floating indebtedness.

The WITNESS: That might have been the case.

Mr. GANS: Well——

The WITNESS: I am not prepared to say that we did not cancel some floating indebtedness at that time. I think it is quite likely that we may have done so.

Q. Well, did the Consolidated Gas Company borrow money that was in turn loaned to any of these companies which I have just mentioned?

A. I don't know of any such direct transaction of money being borrowed by the Consolidated Gas Company for the purpose of loaning it.

Q. Referring to Complainant's Exhibit No. 79, that I believe was prepared by you or under your direction, Mr. Carter?

A. Yes, sir.

Q. And it states the value of the real estate as $10,929,789.57, and of the plant as $16,087,428.72?

A. Yes, sir.

595 Q. I now call your attention to the report of the Consolidated Gas Company to the State Board of Tax Commissioners, and ask you if that is your signature?

A. That is my signature, yes, sir.

Q. And that is the signature attached to the affidavit?

A. Yes, sir.

Q. And you swore to that before Wallace Young, Notary Public, on the 29th of November, 1905, did you?

A. Yes, sir.

Q. Now, turning to Schedule D, the real estate and plant is stated at a value of $19,678,612.76. Did that include the two items that I called your attention to in Exhibit 79?

A. It includes the same two items, yes, sir.

Q. Mains are stated in Exhibit 79 at $7,852,151.03, and services at $1,212,071.09. Referring now to Schedule D of the Tax Report, mains and services, $4,398,160.82, are those the same two items that are set forth in Exhibit 79, under the head of mains and services?

A. The same two items, yes, sir.

Q. Referring to Schedule K——

Mr. BURR: You mean Schedule K in the Tax Report.

Q. Schedule K in the Tax Report for 1905, in second column is: "Present value of property in streets, highways and public places allowing depreciation, $4,398,160.82," which is the same as in Schedule D under the head of mains and services. In the first column of Schedule K is the present value of property in streets, highways and public places on basis of cost of reproduction new, $5,801,466.10. That refers to the same items, that is, of mains and services, does it?

A. Yes, sir.

Q. And is the valuation on basis of reproduction new, is that right?

A. Yes, sir.

596 Mr. PAGE: I offer this report in evidence.

Mr. GARVER: For what purpose is this offered. To impeach the witness?

Mr. GANS: I think it is competent both to impeach the witness and for the purpose of establishing an independent valuation put by the company itself upon its own assets, and an admission by the company of the value of its assets.

Mr. GARVER: The courts have held in numerous cases that statements filed for purposes of taxation are not valuable as evidence to determine the value of property, and we have shown here the manner in which property is to be estimated for tax purposes under the city charter, that is the Commissioners are obliged to access the property for what it would sell under ordinary circumstances. Now, it is a very different proposition from the value that is to be placed upon property in condemnation proceedings or in proceedings of this kind, which are similar to condemnation proceedings.

Mr. MATHEWSON: Or of its value as an operating concern.

Mr. GARVER: Yes. Therefore it does not seem to me that this tends to impeach the witness or that this is of any value in itself as evidence showing the assets of the company.

Mr. GANS: The Master will observe in one of those items there is a distinct statement that the estimate was based upon cost of reproduction new.

Mr. GARVER: Yes, and cost of reproduction new means what it would sell for under ordinary circumstances if you had it produced new.

Mr. MATHEWSON: Mr. Simpson has already testified that he gave

the figures to Mr. Carter for the mains and services and that
597 the figures he gave were merely cost of labor and material for laying in soft dirt, excluding rock excavation and all other services which go to the full value of the mains in the ground, and that it did not represent the full value of the services or of the mains in the ground.

Mr. GANS: After all that may go to the value of the exhibit and its effect in impeaching the witness and establishing what the value of the property was by the admission of the complainant. I do not think it can possibly go to its admissibility.

The MASTER: I will take it and give you an exception, Mr. Garver.

Received and marked State Exhibit C.

Q. Were these figures, Mr. Carter, as set forth in this tax report, State's Exhibit C, prepared by you after some consultation?

Mr. GANS: Yes or no we are entitled to have to that.

The MASTER: Yes.

Mr. GARVER: I think it is proper to wait until the witness answers. He may answer yes or no.

A. I answer no; the report was not made up by me.

Q. The report was not made up by you or prepared by you?

A. No.

Q. Was it made up under your direction?

A. Made up under my direction, or by my direction would be more correct, possibly.

Q. Well, this was practically a continuation of a series of reports filed by you, beginning with the year 1902, was it, Mr. Carter?

A. Beginning with the year 1899, if my memory serves me.

598 Q. When was the first report sworn to by you, Mr. Carter?

A. It would be impossible for me to say until I saw all of the reports. It might have been 1902; it might have been earlier or later.

Q. I show you the report of 1904, which is signed by you. You remember you were examined at some length by Mr. Hughes before the Joint Committee of the Senate and Assembly in reference to this report?

A. I think that that was the year.

Mr. MATHEWSON: You refer to the Joint Committee of 1905, of course?

Mr. PAGE: Yes.

Q. And the item of real estate and plant in the report of June, 1904, was given as $19,673,075.42. Do you remember that you were asked by Mr. Hughes at that time:

"Q. Will you please take the item in that report, the first item "of real estate and plant, $19,673,075.42. Now, that is a statement "of the value of the real estate and plant of the Consolidated Gas "Company to June 30, 1904, is it not? A. That is exactly what "it is."

Do you remember so answering?

A. It is quite likely.

Q. Well, do you remember it or don't you?

Mr. MATHEWSON: If you let him see the testimony, perhaps he will be able to answer.

A. I think if the testimony reads to that effect I should reply affirmatively, yes.

Q.—.

"Q. That is exactly what it is?"

And you answered

"As near as we could determine.

599 "Q. That is what I am asking you? A. That was the "value of the property at that time."

Was that——

A. As nearly as we could determine for the purposes of that report.

Q. No, but did you answer these particular questions in that way?

A. Well I answered it there as nearly as we could determine it.

"Q. That's it exactly. In other words when you came to make "up the report to the State Commissioners for the year ending June "30th, 1904, you sought to ascertain fairly what the value of the "property of the company was? A. Precisely."

Q. Did you so testify?

A. Yes, sir.

"Q. And you took the various properties of the companies with "which you were familiar and you fixed what you decided to be the "fair value of the properties and stated these values in your report? "A. Precisely."

Q. You so testified?

A. Yes, sir.

"Q. And under the head of Real Estate and Plant you put down "the figures $19,673,075.42 as the value of the real estate and plant "of the company? A. Yes, sir."

Q. Did you so testify?

A. Yes, sir.

Mr. MATHEWSON: What page is that?

Mr. PAGE: Pages 369 and 370 of the record.

"Q. Before you get to that as suggested, is that the value that "was arrived at after consideration of the matters by others besides "yourself? A. That is the case, Mr. Hughes."

Q. Did you so testify?

A. Yes.

600 "Q. And with whom did you advise in making the de- "termination of value? A. The engineers of the company.

"Q. Who were they? A. Mr. Bradley and Mr. Woods.

"Q. And who else? A. The Assistant Secretary who has charge "of the distributing system of the company.

"Q. Who was that? A. Mr. Simpson, Mr. C. C. Simpson.

"Q. Anybody else? A. I think if we were in doubt I would "have consulted with the President from time to time with regard "to the figures that went into these reports.

"Q. Yes, sir, and probably with other counsel? A. Probably—

"always—always with counsel. Reports are always submitted to "counsel and fully approved before being filed.

"Q. You sought in this way to get from all persons connected "with the company who had expert information as to the value of "the property what would be a proper valuation thereof on that day? "A. Yes, sir."

Q. Now, did you so testify?

A. Yes, sir.

"Q. And the amounts which are stated in this Schedule B that "you have before you, and that report of 1904, were those arrived at "and stated? A. Yes, sir.

"Q. And with the concurrent judgment of these various men "familiar with the facts? A. Yes, sir."

Q. Did you so testify?

A. Yes, sir.

"Q. Taking then the first item of real estate and plant $19,673,-
"075.42, and taking that as the value thus arrived at of the
601 "real estate and plant, state whether or not that covered all
"the real estate and plant of the company; that is to say, the "land, the buildings thereon, and stoves, the holders and various "apparatus which are connected with your business of gas making "and apart from the items which are separately mentioned later on, "such as mains and services and meters, stoves and personal prop-"erty; is that correct? A. That is correct."

Q. Did you so testify?

A. Yes, sir.

Mr. PAGE: I offer this report of 1904 in evidence.

Same objection; same ruling; exception.

Received in evidence and marked State's Exhibit D.

Q. Is this report in your handwriting?

A. No, sir.

Q. Any part of it?

A. No part of it.

Q. Was the 18th Street plant included in the property that was valued in State's Exhibits C and D, a part of the value of the land and property?

A. I don't know what exhibit you are referring to.

Q. Exhibit C in the Tax Report of 1905, and Exhibit D is the Tax Report of 1904. In real estate and plant was the 18th Street property included in that value?

A. To the same extent that the plant at any other station was included in it.

Q. Well, it was included?

A. Eighteenth Street was included; yes.

Q. Did you, during the recess, try to inform yourself as to the cost of the properties that were carried on the books of the constituent companies in 1884?

A. No, sir; I did not.

Q. There is no way you could get at that except by going to the books of the constituent companies, is that right?

602 A. I don't know of any other way, Senator.

By Mr. MATHEWSON:

Q. Do you know that you could get it even in that way?
A. The value?
Q. The cost.
A. No, I would not expect to get the cost of the properties from those books. I don't think their books show the cost.

By Mr. PAGE:

Q. What would they show?
A. They would show the book value, which might be far from the cost. In fact I have every reason to believe it was much less than the cost and very much less than the value of the properties.

By Mr. GANS:

Q. I do not understand that you swear that you know that the book value is far less than——
A. That is my opinion. The Senator asked if that was my understanding, and I testified that it was.

Mr. MATHEWSON: He asked what they would show and you answered the question. I think your answer was fair.

Q. Well, let us see about it. I believe you testified you didn't know anything about the figures that appear upon those books?
A. Only in a very general way.
Q. Can you tell us within a million dollars what they are?

Mr. MATHEWSON: What do you mean by "what they are"?
Mr. GANS: What the figures as to the cost of the plant appearing upon those books are?

603 A. I should infer that the cost of those plants——
Q. No, can you tell us, not what you would infer, but can you tell us?
A. No, no way of knowing except to go through their books with very great care, as to what the cost was, and the book values in their books would not show—nothing but an appraisal made would show the value of that property.
Q. Then aren't you a little reckless in offering an opinion?

Mr. GARVER: Objected to.

By Mr. PAGE:

Q. Have you ever gone through those books of the original companies to ascertain that?
A. No, but I have seen some statements made and contained in Senate Document 47 representing the book values of the properties of some of the consolidating companies, and I know the values there given as the values of the properties of some of the companies are simply absurd. It don't represent in one case, I think, ten per cent. of the value of the plants.

By Mr. GARVER:

Q. What case was that?

A. That was the case of the Manhattan Gas Company. They were carrying on their books two plants at Fourteenth street and Eighteenth street at something like $60,000, and they were appraised at, I think, $3,300,000; two large stations with plants of an aggregate capacity of over 7,000,000 feet of gas a day.

By Mr. GANS:

Q. Then you are somewhat of an expert on values?

604 Mr. MATHEWSON: He doesn't have to be to state that.

A. I am not posing as that.

By Mr. PAGE:

Q. Then if Senate Document 47, which I believe was Senate Document 47 of 1886, stated the value, or that that property was carried on the books of the Manhattan Company at a cost of $4,872,999.49, it would be stating more than your estimate of what the property was worth?

A. I am referring to the station plant only of the Manhattan Gas Company, located at Fourteenth Street and Eighteenth Street, the foot of each street, East Fourteenth Street and West Eighteenth Street, and referring to no other property of that company; and that property I know was not carried on their books at anything like $4,000,000 or $1,000,000, nor even $100,000, according to the statement in Senate Document 47.

At 4.05 P. M. adjourned to August 8, 1906, at 11 A. M.

Last Exhibits:

Complainant's 96.
State's, D.
City's, 1.

605 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, WEDNESDAY, *August* 8, 1906.

Met pursuant to adjournment.
Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Mead, Mr. Page, Mr. Gans, Mr. Burr, Mr. Taylor.

606 ROBERT H. CARTER resumed.

Cross-examination by Mr. PAGE continued:

Q. Mr. Carter, have you any of the statements that we called for yesterday?
A. To which statements do you refer, Senator?
Q. Well, you were to prepare statements showing the details of the indebtedness, for instance, of the consolidating companies.
A. I have a memorandum showing the indebtedness of the consolidating companies as given on page 10 of the report of the joint committee of the Senate and Assembly in 1905 and a statement showing the indebtedness of those companies as they appear upon the books of the Consolidated Company under date of November 11, 1884, and the statement also shows the variations between the amounts given in the Senate report and in our books (producing papers).
Q. Where did you get these figures, Mr. Carter?
A. From the books of the Consolidated Gas Company, the journal and ledger.
Q. The first journal and ledger?
A. Yes.
Q. As originally opened?
A. Yes, sir.
Q. And according to that ledger the figures in the first column of this exhibit show the amount of outstanding indebtedness of each of the consolidating companies that was assumed by the Consolidated Gas Company; is that right?
A. Yes, sir.
Q. Was this the bonded indebtedness of those companies?
A. The total of $2,971,574.27 includes $2,329,000 of bonded and floating debt for which capital stock was reserved to retire, and miscellaneous liabilities in the shape of consumers' deposits, amounts

due under contracts and other items aggregating $642,554.27, making a total of $2,971,554.20.

Q. The amount of capital stock which was reserved to meet these outstanding liabilities and subsequently sold by the Consoli-
607 dated Gas Company amounted to $3,500,000, did it not?

A. No, it did not, Senator.

Q. What was the $3,500,000?

A. The total amount of capital stock reserved, being the difference between $35,430,060 and $39,078,000, being the total amount authorized, included the amount reserved for the retiring of these obligations of the consolidated companies, aggregating $2,329,000, and the working capital, amounting to $1,303,000 I think.

Q. Then the entire capital stock and outstanding indebtedness of the constituent companies amounted to $19,971,554.27, is that right—$17,000,000 added to that?

A. That is the case, yes, sir.

Q. Now I believe you were to ascertain how much of the different securities that were purchased by the company, as testified to at the last session, was purchased out of the proceeds of the $20,000,000 debentures, if any?

A. I am not aware that I was to prepare any statement of that sort, Senator. You may have asked me whether I knew about it at that time, and I don't think I did; and I certainly did not attempt to make any statement of it. I might say that we have in evidence now an exhibit which shows how the proceeds of the sale of the debenture bonds were employed as of October 31st, 1905, which I think would answer the question.

Mr. MATHEWSON: Do you remember the exhibit number?

The WITNESS: Complainant's Exhibit 80.

Mr. MATHEWSON: Page 348.

Q. Referring to Exhibit 80, can you state whether any of the proceeds of the debenture bonds of 1904 were employed in the
608 purchase of securities of other companies besides the Astoria Light, Heat & Power Company?

A. No, they were not.

Q. Now I believe you were to prepare a statement showing what premium had been received upon the debenture bonds of 1888 and the premium that had been paid in redeeming a portion of that issue of bonds.

A. That statement is not completed. It involved going over the accounts for a number of years to pick out the amounts of premiums paid on the stock retired——

Mr. MATHEWSON: You mean on the debentures.

The WITNESS: On the debentures retired, I should say, and charged against bond premium account, and that is in preparation now and I shall have it completed this afternoon.

Mr. MATHEWSON: You were to prepare for Mr. Burr the balance sheets for the end of the year.

The WITNESS: I have them, if you want them now.

Mr. BURR: Yes I would like to have them. In fact if you have

any statements which have been already called for, I would suggest that counsel for the complainant furnish them to us and give us a little time to go over them instead of handing them to us while the witness is on the stand.

Mr. GANS: I might suggest, if Mr. Burr concurs, in order that our rights may be preserved on the record, that where we ask for a statement in this form the request be understood to mean or be equivalent to a request on our part that the books containing those facts be produced and that the acceptance of the statement
609 be not deemed a waiver of our right to verify those statements from the books in any case. In other words where we put in a statement of this sort made up in this form, we put it in subject to our right to verify it from the books of the company. Otherwise, the Master will see, it is perfectly simple but very long-winded, instead of asking for the statement of these balances, we might ask for the books themselves; and in order to save time we try not to, but at the same time we do not want to buy a pig in a poke or accept anything with our eyes closed. Is that satisfactory to Mr. Mathewson?

Mr. MATHEWSON: No, I think where you call for a statement and a statement is made up you do not call for the books. You call for a statement because you do not want to call for the books at this particular time.

Mr. GANS: No, but we do not want to foreclose ourselves by putting in the statement.

Mr. BURR: As Mr. Mathewson has just said, we do not want the books at this particular time, but want the right to verify them subsequently.

The MASTER: It was understood that when summary statements were put in by Mr. Mathewson, it was subject to your right to verify the same from the books and also that would involve your right to use the books for purposes of cross-examination. Because if the books had been produced here by Mr. Mathewson in the first instance instead of presenting a summary made up from the books they would have been in court and you could have had the right to use them on your cross-examination; therefore, following out that theory, you are not foreclosed from the right to use the books in so
610 far as the statements may not be full or complete or not be satisfactory.

Mr. GANS: You see the precise point I wanted to cover was this. Of course when Mr. Mathewson produced evidence in that form, our rights were as you have defined them. If we call for something and then introduce it in evidence, unless we are to safeguard ourselves in the way I have suggested, it might be held that we had foreclosed ourselves from going into the books in respect to these particular matters, and I wanted it distinctly understood when we introduce evidence of this sort, it is simply in order to save time, and that we are introducing it in this way rather than to call for the books themselves, reserving our right to call for the books themselves if necessary to verify the statement.

The MASTER: It does not seem to me that you lose any rights under the circumstances, Mr. Gans.

By Mr. BURR:

Q. I would like to ask Mr. Carter in reference to the paper which has just been handed to me by Mr. Mathewson, purporting to be trial balances for each month during 1904 and 1905, whether these trial balances are made up from the operating ledger as well as the general ledger?

A. They are made up from the general ledger.

Q. Alone?

A. They are copies of the monthly balance sheets.

Q. They are not to be taken then as being made up from the operating ledger?

A. Not from the operating ledger; from the general ledger.

Q. I asked for the operating ledger.

A. The operating ledger would be identically the same
611 thing, with those amounts divided into from a dozen to fifteen items each, and then multiplying those by 15 or 20, as the case might be.

Mr. BURR: That is what I am informed by the city's accountants they desire; that is what we asked for.

Mr. MATHEWSON: I don't think that is reasonable; certainly not at the present juncture.

The WITNESS: Those statements summarize what is in the operating ledger and are identical——

Mr. BURR: Is there any objection to having the balances, month by month for 1904 and 1905, made up from the operating ledger.

The WITNESS: The balances of the operating ledger would simply indicate a summary of the entries made each month.

Mr. BURR: That is not the question I asked. Is there any objection?

The WITNESS: Well, that is a statement——

Mr. BURR: Is there any objection to making up a trial balance sheet month by month for 1904 and 1905 from the operating ledger?

Mr. MATHEWSON: Yes, there is.

Mr. BURR: That is refused, is it?

Mr. MATHEWSON: Yes, we shall not make up any such statement as that, certainly not unless directed to, any more than we would be willing to go into all that detail unless ruled by the Master that it was material. We have presented a statement of the cost of gas for the nominal year and for the calendar year of 1905, ending October 31, 1905, which you are entitled to test, but these are of no value in doing that; and why we should make up a balance sheet with
612 a multitude of items for every month for two years Heaven only knows. I cannot conceive why we should.

Mr. BURR: Then I understand that counsel for complainant have made the balance sheets from the general ledger for each month during 1904 and 1905.

Mr. MATHEWSON: No, from October 31st, 1904, to October 31st, 1905, being thirteen balance sheets, that being the period covered by the statement.

Mr. BURR: And that you refuse to make up a monthly statement

of the balance sheets from the operating ledger from the same period.

The MASTER: Does it appear it was called for?

Mr. BURR: Yes, sir; that is what the city's accountants desired to have. Without going back a number of years they want that explicit and detailed information for the years 1904 and 1905.

Mr. MATHEWSON: Two years?

Mr. BURR: Two years. That is what they have asked for.

The MASTER: Where does it appear you asked for it?

Mr. MATHEWSON: The Master can see what that means.

The MASTER: Where does it appear you asked for it.

Mr. MATHEWSON: Fifteen or twenty times what you have there would means for a single year from the operating ledger—those various accounts divided into a multitude of little accounts. It is not required for the cross-examination. I do not see that it is required at all at present, if at all.

Mr. BURR: If it is too much trouble to make up a state-
613 ment from the operating ledger I shall have to ask for the production of the operating ledger itself.

Mr. MATHEWSON: When Mr. Burr gets through cross-examining the witness, if he has not completed already as I thought he had, I think it will be time then to say whether anything he wants is material to such cross-examination. Certainly no such mass of detail as is now required is material and I think I am quite correct in assuming that all this is desired for the purpose of the city's expert testimony in preparing their own case in advance.

Mr. BURR: You are quite mistaken. It is required so that we may intelligently cross-examine this witness. I have not finished my cross-examination of the witness by any means, and I call for these statements so we can fully cross-examine him.

The MASTER: Without further discussion will counsel refer me to the point in the record where these balance sheets were called for.

Mr. BURR: On page 482 you will find we asked for the general ledger. Later on before the close of the hearing I asked Mr. Carter to make that so it would be full from the operating ledger also. Previously Mr. Carter in differentiating between the operating and the general ledgers stated that the general ledger was a condensation of the operating ledger and I said to him very distinctly, I don't mean a condensed balance sheet but one showing each account on the ledger.

Mr. MATHEWSON: This is not a condensed balance sheet. A condensed balance sheet does not have a dozen lines, certainly not twenty. I have got a condensed balance sheet here I will show you and you can see what the difference is. That is a full account, not condensed.

of the general ledger.

614 The MASTER: I find no other request for the production of a trial balance except the one on page 482, where the witness was requested to prepare a copy of the trial balance of the general ledger for each one of the months of 1905. This statement I understand he now produces, being twenty-five typewritten pages.

Mr. BURR: We won't ask him to make up any further statements

if counsel will now stipulate we may have the operating ledger here for that year. It is not in use. So that we may verify any additional information we may want to ascertain from these trial balance sheets.

Mr. MATHEWSON: If counsel desires any further details than this, or the operating ledger, or a copy of the operating ledger for these months, for the purpose of cross-examination, isn't it proper for him to state in what connection he proposes to use it? Why we should produce these books or copies of them in the air I do not quite see.

Mr. BURR: I propose to use it for the purpose of intelligently cross-examining this witness as to what was the real cost of the production and manufacture of gas in New York during those years.

The MASTER: The entire question is simply in connection with Mr. Burr's right to use the book for the purpose of cross-examination, and I will pass upon it when he resumes his cross-examination after Senator Page has finished. But it is only fair to say, Mr. Burr, that I shall expect you to show me how it is material. I think when you cross-examine the witness on the stand, and ask him to prepare a statement for you, a tabulation, in the course of this hearing going on from day to day, and he comes in here with a statement
615 twenty-five pages long, which goes very much into detail, that before you insist on the production of something else right away you have got to show that this is not sufficient for the purposes of your cross-examination, and I do not think it is right that you or any other party here, with a lot of expert accountants, should in the course of cross-examination expect this complainant here to furnish the accountants material to work up your main case. That is not cross-examination.

Mr. BURR: This is not needed to work up our main case, Mr. Master. It is needed to test the witness's statements as they appear in these printed extracts or typewritten extracts from the books of entry.

The MASTER: That you are entitled to do and that I shall allow you to do, but I shall ask you to let me see how it is material in view of the length of this statement. I may be entirely wrong about its sufficiency, but it seems to me it is full enough to cover all your questions.

Mr. BURR: I hope it may be. I simply ask for the right to have it confirmed by the operating ledger, which is the main book.

The MASTER: And if it appears that it is not sufficient for your cross-examination why of course it is proper for you to apply for an order directing the production of the operating ledger, which they can produce.

Mr. BURR: That is the only thing I have in view, Mr. Master.

Mr. PAGE: It has reached one o'clock. I might state to Mr. Carter one or two things I am going to take up this afternoon so he can prepare himself on them, if he wants to. I would like the analysis or the segregation of the taxes, how much for local and for franchise and the other state taxes for the year as covered by Exhibit 93.

616 The WITNESS: I offer this as a suggestion only. Our taxes are assumed to cover the calendar year.

Mr. PAGE: Well there was a difference, I believe, between Exhibit 93 and Exhibit 94.

The WITNESS: With a statement that would cover a nominal year, we take the taxes of two years and split them up on some arbitrary basis, whereas if you will accept for the year 1905 the taxes as assessed that I can very readily give you, if that will be satisfactory to you.

Mr. PAGE: Oh, yes, that will be. Now, this other exhibit does not show your rentals received from gas stoves. Could you get that?

The WITNESS: Yes. There is another statement that gives the miscellaneous income in the gross, and we could just divide it up to show how much is real estate rent, stove rent, discount or any other source of income. I will have a memorandum of it down this afternoon to show how much of it is stove rentals.

At 1:05 P. M. a recess was declared until 2:15 P. M. this day.

After Recess.

ROBERT A. CARTER—Cross-examination by Mr. PAGE continued:

Q. Referring to Exhibit 84, "Fixed charges, $972,423.44," what is that item?

A. That comprises the interest upon convertible debentures and upon the debenture bonds of the issue of 1888, less interest received upon temporary investments and loans.

617 Q. Well, would you carry into that the interest returns on bonds that you hold of other corporations?

A. No, sir.

Q. It is simply the interest then on such of the $20,000,000 debentures as have been issued and what is left of the issue of debentures of 1888 less the interest that is received on the funds realized from the debentures of 1904?

A. Yes.

Q. Under what account or accounts on your books would that item appear?

A. Under a single account called "Interest on Bonded Debt Account."

Q. Does that account show the details?

A. Yes; of course the charge, Senator, is made up monthly and the credits appear monthly, and it would require the canvassing of the account for the entire year to reach that aggregate and separate it into its component parts.

Q. Exhibit 93, "Fixed Charges $936,888.24," is that taken from the same account?

A. Yes.

Q. But for the calendar year of 1905 the account is $35,000 more than it was for the nominal year ending October 31, 1905?

A. That is the case, yes, sir.

Mr. MATHEWSON: As investment proceeds at Astoria, the amount

of capital invested on which they can realize a return is diminishing.

Q. In which particular ledger would this account appear in the greatest detail, the operating ledger or the general ledger?

A. In the operating ledger in the greatest detail.

Mr. PAGE: We request the production of the operating ledger showing the details of this item in both Exhibits 93 and 94.

Mr. MATHEWSON: We will produce details of the items on which you are cross-examining.

Mr. GANS: When we make a request of this sort—and I
618 want it to apply to all the requests that we make, because I am trying to save time—when we make a request of this character it is for what we conceive we are entitled to, namely, the books; but for the purpose of facilitating matters, in most instances, unless we specify otherwise, we shall be willing to accept an extract from the books, subject to our right to verify that extract from the books themselves, and will put in evidence, as far as we do put in evidence, extracts from books subject to that same right.

Mr. MATHEWSON: You have requested the books. Perhaps Mr. Carter can make up an abstract covering the details which you desire which may assist you, and if you are entitled to examine the books, we will bring them down as you desire, showing those items. There is no difficulty about that.

Q. The next item is the matter of "Contingent expenses, including renewals and replacements, $1,328,316.37." That appears to be a charge of ten cents on the total amount of gas sold during that year; is that correct?

A. That is the case, yes, sir.

Q. Is that amount an estimated amount, based upon the number of cubic feet of gas sold?

A. Yes, sir.

Q. Is there such an account on the books?

A. There is, yes.

Q. When is that posted?

A. It is posted monthly. That represents the aggregate amount; the item in that statement represents the aggregate of the postings for the period of one year, monthly postings.

Mr. GANS: Each month you post ten cents on each thousand cubic feet of gas sold during the month, for that period?

The WITNESS: Yes, sir.

619 Q. When did you commence keeping such an account?

A. The account was opened, to the best of my recollection, in the spring of 1905.

Q. You do not remember the exact time, do you?

A. My impression is that it was in the month of May.

Q. Then for the time prior to May, 1905, this calendar year, how did you arrive at the amount?

A. The amount for the months of January, February, March and April, 1905—assuming the first entry to have been made in May—

was computed from the sales of those four months and entered in May.

Q. Prior to that time, for the twenty-one years that your company has been operating, have you carried such an account?

A. No, no part of that time.

Q. That account was opened subsequent to the sessions of the Investigating Committee of 1905?

A. I do not recall the date that the sessions terminated, so that I am not able to confirm that understanding.

Mr. PAGE: I will refresh your recollection by referring to the report of the committee.

Mr. MATHEWSON: They terminated in April, if there is any doubt about it.

Mr. PAGE: May 2d, 1905.

The WITNESS: The entries were made subsequently then, to the adjournment of the committee.

Q. At whose suggestion was this account opened at that time, if you remember?

A. I think the account was opened as the result of a general conference, canvassing the subject from the standpoint of the necessity for such an account, as a means of providing——

Mr. GANS: I think we asked at whose suggestion the account was opened, and for nothing else.

620 Mr. GARVER: I object to counsel interrupting the witness.

Mr. GANS: I think I am distinctly within my rights, when the witness starts an answer absolutely irresponsive, and proceeds to give us a discussion on something that we do not want.

Mr. GARVER: You can move to strike out the answer after he gets through. I do not think you have a right to interrupt him.

Mr. GANS: I insist that the question be answered, with due respect.

The MASTER: Had you finished your answer?

The WITNESS: No.

The MASTER: My understanding was that the question was at whose suggestion the account was opened, not for the purpose of it, but at whose suggestion was it opened. You stated that it was as the result of a general conference; that calls, as an answer to that question, for you to state who was present at that time.

The WITNESS: Then the question is answered.

Mr. GANS: I do not think we have had a single name.

The WITNESS: Have you asked who were present?

Mr. PAGE: The question was; at whose suggestion this entry was made, or at whose suggestion this account was opened.

Mr. MATHEWSON: He said it was the result of a general conference.

Mr. PAGE: That is not answer to the question.

Mr. GARVER: It is, unless there was some particular person who directed him to open it. Your suggestion is a pretty broad suggestion in itself.

621 Q. Who was present at that general conference? What was that general conference—of the Presbyterian Church or of your company?

A. There may have been various conferences of the Presbyterian Church, but they were not particularly concerned in this.

Q. Now, this particular general conference as you call it——

A. Pardon me for interrupting. I did not say it was any particular general conference. I said nothing of any particular general conference.

Q. Was there any general conference held at which this subject was discussed, and if so by whom was it discussed and who was present at that general conference?

A. Preumably all the officers of the company.

Q. I do not care for your presumption. I want the facts.

A. I should be loath to testify positively as to who was present. Mr. Addicks was present, and I think the Vice-President, Mr. L. B. Gawtry was present; possibly the assistant secretary. I was present myself.

Q. Was counsel present?

A. Counsel was not present, no.

Q. Did you have any conference with counsel before opening this account?

A. I think not; I have no personal knowledge of any.

Q. Was it stated at that conference by anybody that this account was advised by counsel, or the opening of this account?

A. No.

Q. Now, on the books of the company, prior to the opening of this account, where were your renewals and replacements being kept, in what account?

A. They would be kept in an account which we call "Depreciation Account."

Q. Have you such an account still on the books?

A. We have such an account on the books at the present time.

Q. In addition to this contingent expense account?

622 A. It is not an expense account; it is an account, a suspense account, not included or comprised in the statement of operating expenses, but an account which at the end of the year we close out against the reserve created by this monthly charge of ten cents per thousand cubic feet of gas sold.

Mr. MATHEWSON: It is closed into that account and then forms part of the ten cents?

The WITNESS: Exactly so; it forms part of the ten cents.

Q. So that the actual depreciation for that year is shown in this account?

A. Yes.

Q. Now, you say that is closed into this account?

A. No, I beg your pardon; I did not say so.

Q. Your counsel did, then.

Mr. MATHEWSON: That is the way I put it; it may not be technically accurate, from a bookkeeping point of view.

Mr. PAGE: Probably it would be well to let Mr. Carter testify.

Mr. MATHEWSON: I merely asked the question; I did not so state.

A. As this entry is made monthly in the books an account is credited in the ledger called the "Renewal and contingency account," a reserve account designed to take care not only of the current loss from renewals and replacements but for any future contingencies which may arise. The amount that is charged into the depreciation account, as renewals and replacements occur at the end of the year, is closed into the renewal and contingency account, a credit account, thereby reducing the reserve for the year to that extent. To all intents and purposes, therefore, this ten cents
623 per thousand that we charge every month includes also the amount that is actually expended for renewals and replacements.

Q. Referring to Exhibit 79, I find "Depreciation and renewals since consolidation." That amounted to $4,770,982.72. Is that the account that was succeeded by this contingent expense account?

A. The contingent expense account has been opened in addition to the depreciation account, and as I have already explained, is carried into operating account or depreciation account, operating as an expense account until the end of the year, and it shows the actual expenditures for replacements and renewals during the year.

Q. Then this amount of $4,770,982.72 would show the amount of actual depreciation, if we may so express it, of your plant in the twenty-one years last past?

A. Yes, sir.

Q. And this aggregate is made up of the entries on your books appearing each year year by year?

A. That is the case.

Mr. PAGE: Now, we would like the production of the books that would show the details of depreciation since consolidation, as set forth in Complainant's Exhibit 79 at page 347*a* of Exhibits.

Mr. GANS: Or, we will accept the same kind of statement as we have specified.

Mr. MATHEWSON: What sort of statement?

Mr. PAGE: Year by year.

Mr. MATHEWSON: I think that was prepared for the Investigating Committee, was it not, or the Senate Committee?

The WITNESS: Yes, I think it was; I think I have such a statement already prepared, showing the amount expended annually.

624 Q. Have you figured the average of the depreciation for each year at any time?

A. The average of the depreciation?

Q. Yes, of this item.

A. What do you mean?

Q. Well if you get $4,770,982.72 for twenty-one years and you divide it by 21 you would get the average depreciation for each year, wouldn't you?

A. No. I have never done so.

Mr. MATHEWSON: You see the sales differ so much year by year

that would hardly give much light on the amount of depreciation per thousand cubic feet sold. It would be merely an arbitrary result which I don't think would help you any, Senator.

Q. You never calculated then what the actual depreciation would be per thousand cubic feet?

A. Oh, always. We know every year what the actual renewal and replacement cost is per thousand cubic feet of gas sold.

Q. What was the actual depreciation for the year 1905 per thousand as shown by the books of the company?

A. 2.12 per thousand.

Q. Have you not stated somewhere that that was a certain amount less than the average depreciation for the last twenty years?

A. No, I made a statement the other day that the average cost for the period from November 11, 1884, to December 31, 1904, of renewals and replacements and repairs was 10.89. I testified that for the nominal year ending October 31, 1905, it was 6.61 and for the calendar year, I think, 7.34 cents, but I would not like to state that.

Mr. MATHEWSON: You testified to the exact figures yesterday?

The WITNESS: I testified to the exact figures yesterday and
625 showed the difference between the average for the twenty-two years and the nominal year ending October 31, 1905, and the calendar year 1905.

Q. Besides this item of depreciation or renewals since consolidation you have also made charges for repairs to the operators and to the buildings and to the mains and services, &c., have you?

A. Yes, sir.

Q. And the aggregate of that account of repairs, since consolidation purports to be set forth on Complainant's Exhibit 79, does it not?

A. Yes, sir, to October 31st, 1905.

Q. Yes, to October 31st, 1905?

A. Yes.

Mr. PAGE: I will ask the same question in regard to those repairs, that the books be produced showing the details year by year. Of course we will take a statement subject to our right to verify it.

Q. What particular contingency arose in May, 1905, that led you to change your method of bookkeeping in regard to depreciation?

A. I don't think there was any contingency that arose at that particular time except that the subject received very serious consideration at that time and the necessity for such a reserve was so apparent that it was thought well to reflect or recognize that necessity in the accounts of the company.

Q. Well, was there any particular or definite purpose that was considered at that time to make this necessary, in your estimation?

A. Only a consideration of the possible contingencies that might at any time arise that would require the employment of such a reserve as we undertook to create by that means. I might say that we took into account such considerations as fluctuation in the cost of material, liability to serious and expensive accidents, having in mind the case of a very grave one which occurred in Boston not

626 long ago which cost the company there a great deal of money to settle in the way of damages; the possibility of variations in the volume of the business might render the presence of such a fund very serviceable to the company; and many considerations of that sort were canvassed very thoroughly in determining the amount that we should reserve.

Q. Then, as I understand, you did this to accumulate your surplus earnings as against a change in the volume of business or some extraordinary occurrence; it had nothing to do with the ordinary operations?

A. Our intent of course was to cover by that ten cents such extraordinary loss as the company would sustain in the removal of the plant to Astoria, among other things, as well as to cover the cost of current replacements and renewals that would take place independently of any transfer of the plant to Astoria from New York.

Q. Was that the reason, to prepare for the depreciation of the plant by its removal to Astoria, or was it for fear that there might be an explosion here as there was in Boston at one time, or that the price of materials might change or the demand for gas might fall off?

A. All those considerations were carefully weighed and our attempt was to provide for all of those contingencies in that reserve.

Q. When do you expect to remove your plant to Astoria?

A. I am unable to say, Senator, when such removal might begin.

Q. I understand from the testimony that when you do remove you will not remove the holders?

A. No. Additional holder capacity will be installed at Astoria, and for distributing purposes the company will probably require all of its present holder capacity in the City of New York.

Q. All that you would remove would be the actual manufacturing plant?

A. That is my understanding, yes, sir.

627 Q. Was not the primary purpose, at the time that you held this general consultation as to the establishment of such a fund, the consideration of the removal of the plant to Astoria?

A. I would say it was one of the principal considerations, but not necessarily the primary one. We foresaw a loss incidental to the removal of our plant to Astoria of something approximating $10,000,000, which had to be taken care of. It was one of the purposes for which a portion of that fund would ultimately be used.

Q. Have you segregated the taxes as I have requested?

A. I have called for them, and I expected they would be here before this, but I have not seen anything of the messenger. If you will give me a moment to go to the telephone I will find out whether I can get them.

Q. Then you did not get that item of the street lamps, what you received?

A. No; I don't think that was mentioned.

The MASTER: Stoves he said.

MR. PAGE: Stove rents, yes.

The WITNESS: If you will excuse me a moment I will see if they are ready.

Q. What did you find, Mr. Carter?
A. It is on its way down here.
Q. It will probably be here this afternoon?
A. Yes.
Q. Referring to Exhibit No. 94, I notice that you have a charge for street lamps, $289,259.09. Just what is that amount?
A. It includes among other things the cost of maintaining, lighting, extinguishing and glazing and so forth the public lamps.
Q. During the year 1905, did you have a contract with the City of New York in reference to street lamps?

628 Mr. MATHEWSON: Do you mean a written contract?
Mr. PAGE: Yes, a written contract.

The WITNESS: I am sure that we did supply the lamps and furnish the city with gas, and my impression is that a contract was duly signed and executed, but I would like to consult the records to make sure of that before replying to your question.

Mr. PAGE: Will you produce your copy of the contract?
Mr. MATHEWSON: Has not the City's counsel copies of the contract?
Mr. BURR: I have not the originals, I will produce them when the time comes if you want them.
The MASTER: Can you not use a copy?
Mr. MATHEWSON: The original is in the possession of the City, as I understand it, with the Comptroller's signature, and I do not think we have an original of their contract. I suggest that the City produce it.
Mr. GARVER: Why cannot we use a copy of it?
Mr. BURR: Mr. Carter might not be able to identify it, not having the original signatures.
Mr. PAGE: I will pass that matter that I was going to examine him on until we have an opportunity to examine the copy that the city has.

Q. Referring to Exhibit 94, under the head of residuals, I find coke, loads, 167,071.7 at a price of $2.02 amounting to $338,300.91. Can you state how that price is arrived at, Mr. Carter?
A. That price is arrived at by taking the total number of loads sold during the year and the amount received for them and dividing one by the other.

629 Q. A load mean- 1,500 pounds, doesn't it?
A. Approximately, yes, sir.

Q. Now, does the Consolidated Gas Company keep an account of the coke sold to the individual consumers or is that kept by the National Coal & Coke Company?
A. That is kept by the National Coal & Coke Company.
Q. Then this is the price at which you furnish the coke to the National Coal & Coke Company?
A. It includes what was delivered to them. It includes also the coke delivered to the water gas stations for use in the generators, which is carted by the National Coal & Coke Company but for which the water gas station is charged through the accounts.

Q. If you will look through this same exhibit further down you will find a charge for coke used, 19,892.54 tons. Is not that the coke which was used in your water gas station?

A. It is the coke that was used at the water gas stations during that year and is a part of the coke that is accounted for as residual disposed of during that year.

Q. But the question that I asked originally was if this coke, the loads above, does not include the coke that is used in your water gas station?

A. Yes, it is coke that is delivered to the water gas station, not as reported there, used. That is a credit to the coal gas station and accounts for the coke which they produce for sale and is treated as a residual. So much of that coke as was delivered to the water gas station and used is accounted for in this same statement as coke used in manufacturing.

Q. Then this coke used is included as I understand it in that 167,071.7 loads?

A. Yes.

Q. And is this item of cartage of $11,164.97 the cartage of the coke that is used in the water gas station?

A. That is the cost of carting that coke from the coal gas station to the water gas station and the item also includes some cartage at the coal gas station which is done by the coke company, but
630 a very small amount.

Q. Well, to whom is this cartage paid, to the coke company?

A. Paid to the coke company.

Q. The $11,164.97?

A. Yes.

Q. The several items of cartage on this statement, do those all refer to the cartage by the company, or——

A. No, sir. Whatever other cartage appears in the statement is cartage done about the stations by the company's own carts.

Q. And the coke company only is paid for the cartage of the coke as between the stations?

A. Yes, sir, that is the case, and as I said, possibly some little carting of coke at the coal gas stations, but a negligible amount.

Q. Just what is the arrangement between the Consolidated Gas Company on the one side and the National Coal & Coke Company on the other with reference to the handling of the coke. Have you any written agreement?

A. No written agreement. The entire capital stock of the coke company is owned by the Consolidated Gas Company, and the coke company is operated by the officers of the Consolidated Gas Company almost exclusively. I should say that the Board of Directors and officers of the company perhaps with one exception are made up of officers of the Consolidated Gas Company. The arrangement provides that the coke company shall attend to the detail of selling the coke and carting it to the customers. The company charges them a certain price for coke or for screenings something less than they charge the customer. The difference is supposed to cover their cost of carting and leave them a margin of profit out of which they pay

dividends to the Consolidated Gas Company. I might say that we have received back in dividends since the company was organized, a very few years ago, some $27,000 against the $50,000 which we invested in capital stock of that company.

631 Q. What is your office in the National Coal & Coke Company?

A. I haven't any.

Q. Well, are the books of that company in your possession?

A. No, sir; but they are subject to my inspection at any time.

Q. Could you produce the books of the Coke Company to show the operations of that company for the period covered by these two Exhibits Nos. 93 and 94?

A. I could do so very readily.

Mr. PAGE: We would like to have those books.

The MASTER: If Mr. Mathewson wants to produce them, all right. If he has any objections to producing them I should say that your method of getting them would be to subpœna them when it comes to putting in your case.

Mr. GARVER: The objection would seem to be that we are getting so far afield in this inquiry.

The MASTER: I do not think it is part of the cross-examination of this witness.

Mr. GANS: I think I can show that it is, because he purports to know about these matters, and that it is legitimate cross-examination on the part of the case that they have put in. They have established the fact that instead of doing their own carting, doing their own business, they have preferred to organize a company to do that—to cart coke and to sell it, and instead of turning the profits in as one of the profits from residuals which reduces the cost of gas directly, they prefer to receive the profits in dividends and to credit them to other accounts. In other words, if you take the bill in this case and take the account submitted you will find this situation, that while the bill may charge as part of the investment in the gas-making business, $50,000 which they have invested in this National

632 Coal and Coke Company, if you examine these exhibits they have put in you will see they do not credit the profits which come from this business as a reduction to the cost of gas. Now they cannot face that situation in that way. I think they are right in charging the investment of the $50,000 to their gas-making business, because I conceive that the sale of residuals is part of that business. I think, on the other hand, we are entitled to examine into the operations of this business, seeing that all the stock is owned by this company, and it is merely a device I might say to carry the account in a little different way. In view of that fact we are entitled to examine into the affairs of this National Coal and Coke Company on the basis of what has been introduced in evidence already, to the same extent that we are entitled to inquire into the affairs of the Consolidated Gas Company.

Mr. MATHEWSON: The fact is, as has already been testified to, that the National Coal & Coke Company was organized as the cartage department of the Consolidated Gas Company, and by that means

the Consolidated Company got its carting done at lower cost than when it was paying outsiders and, besides, the profit that the outsiders formerly made going to the National Coal & Coke Company was paid back to the Consolidated Gas Company, and therefore the whole arrangement was an economical one for the Consolidated Company. Now, Mr. Gans raises the point that the dividends which were received by the Consolidated Gas Company from the National Coal & Coke Company should go as a credit on the cost of the production of gas, in view of the fact that the capital of the National Coal & Coke Company, $50,000.00, we claim to be part of
633 our investment in the gas business. The proposition which he advances is one which is a fair one and legitimate argument.

We can show it perfectly well without going to the books of the National Coal & Coke Company, and we will show it if counsels desire, how much was paid back by the National Coal & Coke Company to the Consolidated Gas Company and how much therefore will be credited on the cost of gas, if that is a proper credit. Of course if it is 25 per cent. a year it is $12,500.00 and when you consider that our total expenses in manufacturing gas are something like $8,000,000.00 you can see it would be an insignificant fraction of a cent, but for what it is worth we have no objection at all to disclosing to counsel, if it is not already on the record, what return was made to the Consolidated Gas Company from the National Coal & Coke Company, and too, if you please, how much cash surplus or how much surplus the National Coal & Coke Company has earned since it was organized in addition to the dividend it has paid back above its capital. That it seems to me meets every possible inquiry that can be directed to that point, and isn't it a shorter way of getting at the very point which Mr. Gans is now arguing? That can be shown in two lines.

Mr. GANS: Our request for the books here has been made upon the same basis as the request for the books has been made in every other instance, that we are willing to take a statement subject to verification.

Mr. MATHEWSON: Yes, we will produce that statement just to let you have a statement of the dividends received since October 31, 1904.

Mr. GANS: Pardon me one moment. My argument goes
634 a little further. We are entitled to a credit on the cost of manufacturing gas not merely of the dividends but to the net earnings of the National Coal & Coke Company.

Mr. MATHEWSON (addressing the witness): Yes, and let us have at the same time the net earnings for the period when there were no dividends, if there were any. My impression is there were a few thousand dollars working capital above the $50,000 capital paid in which have been accumulated by way of surplus beyond dividends paid back, and we will show you the exact facts.

Mr. GANS: May we have a statement of the operations of that company, in connection with that?

Mr. MATHEWSON: I think so. I see no objection to it at the moment. I don't quite know what relevancy that may have, but

I will see what they are. If we never got any dividends from the National Coal & Coke Company the fact would be that the amount we paid would be a more economical way of handling this than it was when we were employing outsiders previously.

Mr. GANS: I do not doubt that, but it is your duty to the public——

Mr. MATHEWSON: Your argument is a fair one. You are entitled to that.

Mr. PAGE: Now, have you those details of the taxes?

Mr. MATHEWSON: Mr. Carter will have to do some figuring first and present them to you to-morrow morning.

635 Q. For the purpose of getting it on the record will you state how you arrived at these percentage figures, cost per thousand made and cost per thousand of gas sold (referring to Exhibit 94)?

A. With respect to cost of gas made, the figures used in calculating such cost is the gas made at the company's own stations.

By Mr. MATHEWSON:

Q. Reduced to a uniform temperature of sixty degrees?

A. It is adjusted to a uniform temperature of sixty degrees as the station make.

By Mr. PAGE:

Q. You divide then by——

A. 10,657,810,000 cubic feet.

Q. And arrive at the other——

A. Then in arriving at the total holder cost, including cost of gas manufactured under agency agreements, we use as a factor the quantity made at the stations of the Consolidated Company plus the quantity manufactured for the Consolidated Company under the agency agreements, or, in other words, 13,587,020,322 cubic feet. In arriving at the cost per thousand cubic feet sold the same method is pursued, except that we use as a divisor the sales instead of the make.

By Mr. GANS:

Q. Now there are certain items on that exhibit in which you use as a divisor the total amount of gas made and sold, or, rather, the total amount of gas sold?

A. The total amount of gas sold would be used as a divisor in getting the cost per thousand cubic feet sold of the gas manufactured by the company, and manufactured for the company under the agency agreements, and all of the distributing expenses.

636 By Mr. PAGE:

Q. That is in all of the items down to station cost, $3,455,091.37, which is carried out under cost per thousand cubic feet made, 32.42 and 33.17, you use as the divisor the 10,657,810,000?

A. Yes, to get the cost per thousand cubic feet made.

Q. And to get the cost per thousand cubic feet sold down to that

same place in the statement, you use the divisor 10,419,461,426 cubic feet?

A. Yes, sir.

Q. Now the items below total cost at the holders is obtained by using the divisor 13,283,163,767?

A. Yes, sir, that being the total volume of the company's sales for that calendar year.

By Mr. GANS:

Q. That same method has been employed with a slight change of the amounts in Exhibit 93?

A. Yes, sir.

By Mr. PAGE:

Q. How is the item cost of gas manufactured under agency agreement, $997,039.89 carried out at 34.04 and 34.82?

A. 34.04 cents is the cost per thousand cubic feet made, which is the amount we paid them for the gas manufactured under the agency agreement. The rate of 34.82 cents is the cost of that gas per thousand cubic feet, of the gas sold which they made for us.

By Mr. GANS:

Q. In other words, making an allowance for gas unaccounted for?

A. Making an allowance for gas unaccounted for. The next item is the total of the gas manufactured at our own stations, and manufactured for us at stations of other companies under the agency agreement. The cost per thousand cubic feet made in
637 & 638 that case is obtained by using as a divisor the total quantity made at the consolidated stations, plus the quantity made for the Consolidated Company.

By Mr. MATHEWSON:

Q. And dividing that into the total expenses both of our make and what we paid under agency agreements?

A. That is the case, and the cost per thousand cubic feet sold at that point is arrived at by dividing the total holder cost by the entire sales for the year.

Q. There appears upon this Exhibit 94 various items of labor, segregated into, for instance, under coal—labor handling—and under residuals—coke, labor handling, and a general item of labor which amounts to $382,000. Are those distributed to separate accounts in your books, as they appear here?

A. Yes.

Q. In which ledger?

A. In the operating ledger.

Q. How would they appear in the general ledger, if at all?

A. In the general ledger the entire expense of the month would appear in one account.

By Mr. GANS:

Q. Total labor expense for the month?

A. No, no total labor account. The labor is not shown in the general ledger at all. The operating ledger, in one account, would cover the entire operating expense.

At 4:05 o'clock P. M. adjourned to to-morrow, Thursday, August 9, 1906, at 11:15 A. M.

Last Exhibits:

Complainant's 96.
State's D.
City's 1.

639 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, THURSDAY, *August* 9, 1906—11:15 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Page, Mr. Mathewson, Mr. Gans, Mr. Burr.

640 ROBERT A. CARTER resumed.

Cross-examination by Mr. PAGE continued:

Q. Have you examined the books of the company so as to be able to testify to the amount of stove rentals received by the Consolidated Gas Company for the nominal year ending October 31, 1905?

A. Yes, sir.

Q. What was the amount received?

A. $120,768.60.

Q. Has that item of income appeared on any statement that you have prepared and submitted heretofore in this case?

A. It has not appeared as a separate item, but it is included in the item of miscellaneous income in a statement showing the gross earnings, expenses, net earnings, miscellaneous income, income from securities owned, total income, fixed charges, dividends paid and deficit.

By Mr. MATHEWSON:

Q. Being Exhibits 95 and 96?

A. Yes, that is the case.

By Mr. GANS:

Q. It was not, however, included in either Exhibits 93 or 94?
A. Those figures are not shown in either of the exhibits named.
Q. But on Exhibits 93 and 94, on the other hand, there was shown or charged to the expense of making gas the cost of repairs to gas stoves, is that so?
A. Included, yes, sir.

By Mr. PAGE:

Q. You state the loads of coke sold, or residual coke, were 171,400.32 loads, and that you received $343,526.94, and that the rate was $2 per load. How did you get that rate?
641 A. By taking the number of loads that were sold, the amount received for them, and dividing one by the other.
Q. That is, dividing the 343,526.94 by 171,400.32?
A. Yes, sir.
Q. Now, will you just multiply by two very rapidly and see if the result would correspond?
A. In the first place the exhibit is not correctly printed from the original copy (Exhibit 93).

Mr. MATHEWSON: Here is the carbon copy of the original copy.
Mr. PAGE: It seems to be the same here.
The WITNESS: Oh, pardon me, it is right. I have the calendar year before me. May I see the carbon?
Mr. MATHEWSON: Refer to the exhibit you are talking about.
The WITNESS: Exhibit 93. The average price is carried out in the decimal but two points. The average price if carried out further would have shown a fraction of a cent over the even two dollars.

By Mr. PAGE:

Q. A fraction of a cent?
A. Yes, sir.

By Mr. MATHEWSON:

Q. So the statement in the exhibit is correct so far as it is carried out?
A. Yes, sir.

By Mr. PAGE:

Q. You prepared for use before the State Gas Commission, a statement of the summary of operations of the Consolidated Gas Company for the nominal year ending October 31, 1905. That was prepared from the books of the company, was it not?
A. May I see it, Senator?
642 (The paper is handed to witness.)

The WITNESS: Yes, that was prepared from the books of the company.
Q. There is a slight variation in the amount of coke that was sold, being 4.15 loads between that figure state- in that exhibit and that figure stated in the exhibit to-day, is there not?

A. There appears to be such a difference, yes, sir, although the amount received is identical.

By Mr. MATHEWSON:

Q. The amount in dollars?

A. In dollars, yes, sir. It would not affect the average price or the average receipts per thousand cubic feet sold or per thousand cubic feet made.

By Mr. PAGE:

Q. Now, of this 171,400.32 loads, 22,738.25 tons were used in the water gas stations of the Consolidated Gas Company?

A. Yes, sir.

Q. And the remaining portion of that coke, how was that disposed of?

A. Most of it was sold to the National Coke & Coal Company. The quantity given as produced for sale under the residuals would include also a small quantity of coke used at the coal gas stations under the boilers, the boilers being used for operating distributing machinery or apparatus.

Q. You use a great deal of the coke in the manufacture of the coal gas itself, do you not?

A. Yes, sir, used under the retorts.

Q. Could you state how much?

A. I could not state the quantity in tons.

Q. Well, Mr. Bradley testified, didn't he, that you got fifteen hundred pounds of coke per ton of coal carbonized?

A. Approximately a load of coke for a ton of coal.

643 By Mr. MATHEWSON:

Q. Long or short ton?

A. For a long ton of coal.

By Mr. BURR:

Q. What is the meaning of a long ton?

A. 2,240 pounds.

By Mr. PAGE:

Q. Well, a ton of 2,240 pounds would give a little more, wouldn't it, than 1,500 pounds?

A. No. We do not use any but the long tons in our record and the coke so used amounts on the average to a load per long ton of coal carbonized.

Q. Well, the result of the operation is that 2/3 of the coal becomes coke, does it not?

A. About 2/3 of the coal becomes coke in weight, not in volume.

Q. In weight, yes, that is what I mean.

A. In weight.

Q. And a long ton, that would make 1,595 pounds, would it not?

A. Approximately.

Q. You have deducted the amount of coke that was used under the retorts to arrive at this figure of 171,400.32?

A. I would say it was not a deduction. We have not taken it into account at all. We deal in our coke records for the purpose of this report only with the coke that is produced for sale.

Q. Do you sell this coal to the National Coke and Coal Company?

A. Coal?

Q. Coke.

A. We do, yes, sir. Not all of it; as has been explained, some of it being delivered to the water gas stations and some of it used about the stations.

Q. I mean the coke you sell.

A. It is sold to the National Coke and Coal Company, yes, sir.

Q. At what price?

A. Varying prices.

Q. What is the lowest price for coke. I don't mean for
644 breeze or screenings, but for coke itself?

A. From memory I prefer not to testify. I can furnish those figures, if they are desired.

Q. You prepared for the Gas Commission a statement showing the prices charged for the coke and screenings, did you not?

A. I remember making such a statement, yes, sir.

Q. Does that refresh your recollection so that you would be able to testify now as to the prices (handing statement to witness)?

A. It would refresh my recollection so that I would be able to testify to the prices effective October 13, 1905, as shown by this statement. Would you like me to read it?

Q. And also what was charged previously during that calendar year.

A. Effective on September 11, 1905. Would you like me to read these into the present testimony?

Q. Yes, I think so. It will save you the trouble of looking them up again.

A. I have no doubt that these figures are correct and I will therefore state from this record that the price charged the National Coke and Coal Company for coke on October 13, 1905, was $2.25 per load wholesale in the yard; $2.65 per load in the yard.

Q. What does that mean?

A. Retail in the yard. $2.75 per load wholesale delivered outside, and $3.25 per load retail delivered outside. Previously to that date the price had been $2.25 per load wholesale in the yard; $2.40 per load retail in the yard; $2.50 per load retail in the yard [some sales]; $2.75 per load wholesale out of the yard and $3.00 per load retail out of the yard.

By Mr. MATHEWSON:

Q. Do you mean to put in the screenings at the same time?

A. The price of coke screenings which was effective Sep-
645 tember 11, 1905, and also on October 13, 1905, was 75 cents per load delivered in the yard under contract; $1.60 per load retail delivered in the yard; $1.70 per load wholesale price delivered out of the yard, and $1.80 retail price per load delivered out of the yard. Prior to that the price had been 75 cents per load delivered

in the yard under contract; $1.40 per load delivered retail in the yard; $1.45 per load delivered at the work's dock on boats; $1.60 per load delivered wholesale out of the yard; and $1.70 delivered retail out of the yard.

By Mr. BURR:

Q. That is on the assumption that the weight of each load was 1500 pounds?

A. Yes, sir.

Q. The difference between 235,586.73, which the tons of coal carbonized would produce in loads of coke, and 171,432, would be the amount of coke that was used under your retorts, would it not?

A. Yes.

Q. And that would amount to 64,186.43 loads?

A. Yes, that is the case.

Q. What is a load of coke; what does it weigh?

A. It is 1,500 pounds.

Q. Then, if you produce from each ton 1,595 pounds there would be 95 pounds more to each ton to be accounted for, would there not?

A. I have not said that it would produce 1,595 pounds.

Q. You just did so state, I think.

A. You stated about two-thirds, and I think you figured that two-thirds was 1,595.

By Mr. GANS:

Q. Your statement, Mr. Carter, as I understand it, was that the amount of coke produced from a ton of coal represents approximately 70 per cent. of the weight of the coal?

A. Approximately 70 per cent.

646 Q. And I understood you to say that the amount of coke produced for sale amounted to that; is that right?

A. Yes, that is the case.

Q. Therefore the amount of coke produced from a ton of coal is somewhat in excess of 70 per cent. of the weight of the coal, is it not?

A. I am not speaking of weight now; I am speaking of loads and tons.

Q. Pardon me a moment. You spoke of weight very distinctly a little while ago, and you reminded the Senator that the way to measure in order to determine the proportion was with reference to weight.

A. The production of coke is a load of coke for a ton of coal, and of the load of coke that is produced in carbonizing a ton of coal we get about seven-tenths of a load for sale.

Q. That is a very different statement from the one you made some time ago?

A. I never had any other figures in my mind. I may have acquiesced in some statements of yours that conveyed some other impression, but those are the facts.

Q. Then your present testimony is that you only get 1,500 pounds of coke to a ton of coal, and that of that 1,500 pounds seven-tenths is available for sale?

A. Yes, and the 1,500 pounds of course is an approximate figure. Coke will average to weigh about 1,500 pounds to the load, and it is sold in loads and not by weight.

Q. I am getting at the product first. You mean by that that your tons of coal will average 1,500 pounds of coke approximately?

A. Approximately.

Q. That is, from some tons of coal you get less than 1,500 pounds and from some you get a little more?

A. Yes, I should think they might vary.

Q. How near would you say that approximation would be?

A. I should want to take at least a year's operations and canvass them very carefully to establish the exact percentages between
647 the coal carbonized and the coke produced in loads for sale, and the percentage of coke produced for sale of the entire coke produced, including what is used under the retorts.

By Mr. MATHEWSON:

Q. May I ask—it is a simple mathematical proposition, is it not. Having found out how much coal you carbonized and how much coke you produced, it would be an easy matter to figure out the ratio, would it not?

A. Yes.

Q. And you simply have not got it in your mind, and you would have to take the figures to compute it?

A. Yes.

Mr. GANS: It is obviously a simple proposition if you have the facts.

Mr. MATHEWSON: Yes, if it is considered material. The witness can take the figures and figure it out exactly; he stated that it is approximately 1,500 pounds of coke to a ton of coal carbonized; it may be 1,520 pounds, and it may be 1490.

Mr. GANS: The witness gave us two very radically different statements.

Mr. MATHEWSON: I think you misunderstood him.

Mr. GANS: No; we did not misunderstand him; he may have misunderstood us. He may not have intended to say what he did, but he has given us a very radically different explanation.

Q. You have stated now that coke is sold by the load and not by weight. Did you not, in answer to Mr. Burr some few moments ago, say very distinctly that a load meant 1,500 pounds. Not approximately, but just that?

A. I did not say it meant just 1,500 pounds. Well, the testimony will indicate that.

648 Q. Haven't you any recollection of it at the moment?

A. My recollection is that I have always qualified my remarks by using the term "approximately." I have used it often enough in the testimony to establish the fact that I meant approximately.

Q. I will agree with you as to that, that you have used it very often in your testimony. At all events, is that what you mean?

A. Most decidedly.

Mr. GANS: I simply want to get the fact clearly on the record.

By Mr. PAGE:

Q. Now, this matter of labor in handling coke; just what labor is that, $36,694.71?

A. It is the labor of removing coke from the retort house to the coke pile, loading and unloading it.

Q. Do you have separate men to attend to that part of the business, or are they the regular retort house men?

A. Regular men who attend to that—coke men.

Q. And are they carried on the pay roll as such?

A. As such, and while their employment as coke men would not prohibit their employment for some other purpose, if it was employed for some other purpose the pay roll would plainly indicate it, how it was employed.

Q. The cartage of $12,630.66; how is that charged in here, when you have testified that the National Coke & Coal Company attended to all the cartage of the coke?

A. The cartage that is charged in there, as testified yesterday, is the cartage from the coal gas station to a water gas station, coke that is delivered for use in manufacture at the water gas station. The carting is done by the National Coal & Coke Company; we pay them for it and charge it against the residual.

649 Q. Now, if you will look further down on Exhibit 93 you will find that the coke used, which you have testified was used at the water gas stations—there is a charge for cartage there?

A. That is an item amounting to $43.87, which is the cost of carting some small quantity of coke at the water gas station, possibly from some temporary storage place to the generator house, where it was employed in manufacture.

Q. You paid that cartage to the National Coal & Coke Company do I understand?

A. The $43.80?

Q. No, the $12,360.66.

A. Yes, that amount is paid to the National Coal & Coke Company.

Q. Now, referring to the item of expense in Exhibit 93, and which is below the total following "Station Cost" $583,278.52, I ask you to state what that is?

A. That item includes the expenses of the branch offices, salaries and incidental expenses.

Q. Is that carried as a separate account upon your books?

A. Yes.

Q. And what is the title of the account?

A. "Expense."

Q. Then, you have another item further down after total distribution, "Expense, general office, $276,823.22." What does that include?

A. That includes the general office expenses, including the salaries and incidental expenses.

By Mr. MATHEWSON:

Q. It also includes counsel fees?

A. I think there are no counsel fees in that, but there may be some counsel fees, some special fees in connection with the Senate Investigating——

Mr. MATHEWSON: No matter what they are; never mind that.

Mr. GANS: Yes, I think that is interesting—let us have that. In connection with what?

650 A. (Continuing:) Senate Investigating Committee.

By Mr. PAGE:

Q. Now, just above, in that total of station cost there is another expense account, $62,441.83. How does that appear on the books of the company?

A. That item includes the station expenses, salaries and incidental expenses.

Q. How does that appear on the books of the company—as it is here, "expense?"

A. Yes.

Q. Then you have two accounts on the books, each entitled "Expense," two separate accounts?

A. We have a separate account for the expense at each station, at each branch office, each street department office, and the general office.

Q. I asked you how the account was headed on the books?

A. It is headed "Expense," with the particular branch or station or office that is comprised in that account.

Q. Then, all these expense accounts are consolidated into some general expense account?

A. All of the accounts showing the expenses at the stations are consolidated in this one item, shown in station expenses, for instance, here, as $62,441.83.

Q. But I want to know whether they are brought together, these various expense accounts, into a general expense account?

A. They are not, except as one of the items they are included in a single item of operating expenses on the general ledger; in that way they are brought together. They are not brought together as a combination of expense items alone.

By Mr. GANS:

Q. That is, the operating expenses on the general ledger include other items besides those charged to expenses on this sheet?

651 A. Yes, includes all the items on this sheet.

Mr. PAGE: I would like to have, if the Master please, for the purpose of further cross-examination on Exhibits Nos. 93 and 94, especially with reference to those items of expense account, the production of the operating ledger and the journal from which the entries were made for the year 1905.

The MASTER: Mr. Mathewson, can you produce those?

Mr. MATHEWSON: Yes, if counsel desire it. I will say that the

books are very large and the accounts are very extensive, and I hardly think they will be of much value. I had supposed that the statements which counsel asked for yesterday would cover some of the points, and to see whether he desired the books. They can be brought down; but I should suggest, if it is desired to check over the items, or any of them, to see if they equal what appears in this summary, Exhibit 93, that the shorter way would be to let a representative of counsel, an accountant, go over these with Mr. Carter and check them from the books, instead of taking them before the Master, if that is desired to be done. I had not supposed that you expected to check those books here.

Mr. GANS: But of course, the accountant is not to be limited to simply going over and looking at a footing on the ledger, and looking at the footing of this, and say that the footing is the same as this footing, and saying "I am satisfied." If they are going to do that only, it is a perfectly idle ceremony.

The MASTER: It is a question as to what the Senator wants for his cross-examination. If he thinks he wants the books,
652 perhaps the best way to do would be to have the books. After he has the books for two or three days, he may get tired of them.

Mr. PAGE: Perhaps I may get tired of them, but we are put in an unfortunate position, conducting the cross-examination in this way. Here are several expense accounts. To any gas engineer the expense charged up in this account is enormous.

Mr. MATHEWSON: I do not think that need be taken down, that statement.

Mr. PAGE: And we must investigate the matter to see whether they have not duplicated; that is the point of the investigation. If we can do that up at the office of the company with an expert, well and good.

Mr. MATHEWSON: If counsel will look at the printed record before the Gas Commission, they will find that those items, or many of them, are set forth in great detail, at counsel's request; I think, Senator Page was the counsel.

Mr. PAGE: No.

Mr. MATHEWSON: Including director's allowances, and salaries of the general officers, advertising, canvassing, and the law expenses, &c.—all those things, and all the detail that could be required was set forth; at least all that was required was produced. If there is any question of duplication of these amounts, Mr. Carter, would not it be easier to check them up at the office, in order to determine that, than to produce them here.

The WITNESS: It seems to me so, and an accountant could do it in very much less time than anybody unfamiliar with accounts.

653 Mr. MATHEWSON: We will produce them if counsel still desires, although I wish to record my view that they will be found of very little value before the Master.

Mr. GANS: If Mr. Mathewson were to consent to have a firm of expert accountants of our choosing go over these books, and make such a free-handed examination as a firm of expert accountants would naturally make in order to satisfy a client, as to the accuracy of

these statements which have been presented here, that would answer our purpose.

The MASTER: I do not see that any party to a litigation is called upon to submit to an audit of his books by a firm of expert accountants for the benefit of the other side. It might be proper, if you want the books to cross-examine on, to have them here, but my own impression is that you will waste a lot of time, and I cannot compel, nor can anybody else compel, Mr. Mathewson to allow a firm of expert accountants to go up and audit his client's books.

Mr. BURR: I should think the operating ledger would be sufficient.

Mr. GANS: I think the Master will bear me out that I have not asked any such thing. I think the Master has mistaken our position. Mr. Mathewson suggested a substitute way of doing it, and I suggested how it could be done. I think that possibly you do not appreciate—if I am not anticipating the position you have taken—the situation presented here, which is very obvious. Here is a statement gotten up by the complainant here, which is gotten up very naturally to represent the best possible showing which the complainant can make.

Mr. MATHEWSON: Come, Mr. Gans; that has not the
654 slightest influence on the conduct of our books or our business. They were kept in the same way long before any investigation was ordered.

Mr. GANS: Let me point out one or two things to the Master. We have here a statement which includes, as one of the items of the cost of making gas, an item of care of street lamps. You will observe that there is nothing appearing on this record, on the other side, of amounts that have been received from the City to balance that item. You will observe that there also appears on this statement an item such as cost of taking care of gas stoves, but you will observe that there does not appear on the record a corresponding item of rental of gas stoves, which would more than cover that. What I mean to say is that we have been offered for your inspection and for ours, as an exhibit, a statement purporting to show how much it costs this company to make gas, an exhibit which on its face before the cross-examination began was exceedingly misleading, because anybody would conceive that it cost this company 74 cents to make a thousand feet of gas this year, which would obviously lead one into an absurd misconception in regard to it. We have been presented here with what purports to be a statement of the cost of gas, and in view of the fact that that statement on its face is exceedingly misleading, I do not think it should be suggested that we are wasting time when we ask to scrutinize the books with regard to other items.

The MASTER: There is no suggestion that counsel were wasting time. My only suggestion was, based on my experience in similar proceedings, that when counsel brings down bulky voluminous books and starts to cross-examine a witness on them, they spend
655 days in getting at results that they could have got at in hours by adopting the course which has been suggested here—namely, that somebody go up with you and go over the books in the company's office outside of the hearings. That is all I intended to suggest, and that is based on considerable experience in these mat-

ters. But, if counsel want the books, I think the shortest and best way would be to bring the books down here and proceed with the cross-examination of the witness from the books.

Mr. MATHEWSON: I think, in view of what Mr. Gans has stated, that I am entitled to say that he is entirely mistaken in the statements he has made. The statement upon which the witness has been cross-examined has nothing at all to do with anything except the cost of production of gas; it does not deal with receipts at all. Exhibits 95 and 96, which were introduced following Exhibits 93 and 94, do show all the receipts of the company, both from gas stoves and the sales of gas and everything else. In this statement showing the cost of gas there is the expense of caring for city lamps. In another statement which was put in is a statement of the money received from the city for city lamps. It is not a fair statement to say that these are misleading. They were not intended to show the receipts from the company, but simply the expenditures of the company in the production of gas.

The MASTER: There is no use discussing the merits. It is simply a case of procedure, and my idea was to save time as much as possible.

Mr. PAGE: I have stated that I was willing to go up there or take an expert up there and inspect the books.

656 Mr. MATHEWSON: We will bring the books down and perhaps on seeing them we can tell.

Mr. PAGE: But I do not want the responsibility of bringing the books down and having any time lost charged up against me. I want it to appear on the record that I was willing to make that concession.

By Mr. PAGE:

Q. You have entered here an item of gas made by other companies under agency agreements. How do you arrive at the amount of that 2,970,384,026 cubic feet?

A. It was the amount of gas made by each company who was manufacturing for the Consolidated Company under an agency agreement in excess of what they manufactured for their own requirements.

Q. Have you any way of measuring their gas?

A. All the gas that they manufacture is measured both at the station meter and either at their consumers' meters or at our consumers' meters, allowing for unaccounted-for gas due to condensation and other causes.

Q. How is that gas delivered to your company?

A. Delivered in our mains, in our holders, whenever we require it.

Q. Are your mains and the mains of the other companies interlocked?

A. I don't be sure that they are or are not. I think in some cases there may be a connection so that we get the gas from the other companies directly into our mains without its first going into a holder.

By Mr. GANS:

Q. Is it not a fact that almost all of it is delivered into your mains?

A. I don't know.

657 By Mr. PAGE:

Q. You don't know the physical means of receiving this gas then?

A. I know the physical means of receiving it and have testified to the physical means of receiving it; what portion is received in one way and what portion in another, I don't know.

Q. As I understand then this is an estimated amount, taking the total output of gas of the company that sells to you and the amount of gas that is shown by their meters to have been delivered to their customers; is that it?

A. I don't see that there is any estimate about it.

Q. And allowing for condensation and for leakage. Is there any estimate about that?

A. The leakage is a calculated quantity.

Q. Well what about condensation?

A. I say leakage. I should say the unaccounted-for gas rather than leakage, because we don't know tnat it was leakage. The unaccounted-for gas is a calculated quantity.

Q. How do you arrive at the unaccounted-for gas, for instance, of the Standard Gas Light Company, if you take the total of the gas delivered to their customers, and deduct it from the total of the gas produced by them and charge the difference to the Consolidated Gas Company?

A. Their sales are augmented by the quantity that we know or assume to be unaccounted for based upon their own experience at the time the agreement was made.

Q. Then the leakage is charged against them according to their experience, not in accordance with the experience of the Consolidated Gas Company, is that right?

A. According to their own experience.

Q. But the gas is delivered in the mains of the Consolidated Gas Company, isn't it?

A. It ultimately goes into the mains of the Consolidated Gas Company, all of it.

Q. Well ultimately——

658 Mr. MATHEWSON: He said some of it he thought was delivered in holders and some direct to the mains and that he could not give the proportion.

Q. Do you know where the point of connection between the Consolidated Gas Company and the Standard Gas Light Company is at which the gas is delivered by the Standard Gas Light Company to the Consolidated Gas Company?

A. I should say that there were several points.

Q. What do you mean by that?

A. I mean that they deliver gas to us at our Ninety-ninth street

holder and I think they deliver gas to us at our 132d street holder, and they deliver the gas to us in our mains.

Q. Where does the New Amsterdam Gas Company deliver gas to you?

A. I should think some of their gas would get into the Sixty-third street holder and the Sixty-fifth street holder, possibly the Ninety-ninth street holder and the 111th street holder, and into our mains.

Q. Are there mains running from the works of the New Amsterdam Gas Company to each of these holders that you have specified, are they New Amsterdam gas mains?

A. Not directly. The New Amsterdam manufacturing plant is situated in Long Island City at Ravenswood, and their gas is conducted to New York through a tunnel under the river and conveyed to their holders in New York City; from their holders or from their mains in New York City the supply is furnished to the Consolidated Gas Company.

Q. You stated, I believe, that you do not know where these points of connection are?

A. No, I don't know all of them. I have named such of them as I believe to exist at the present time.

Q. Is it not a matter of fact that your mains and the mains
659 of these other companies which are said to be manufacturing gas for you under an agency agreement are so interlocked that the gas of one flows into the main of the other?

A. I have already testified that there may be points at which the distributing mains of one of the companies manufacturing for us under that agreement may be connected with ours and the supply of gas furnished directly into our mains.

Q. Well, there may be. Now, is there?

A. My understanding is that there is such a connection with the New Amsterdam main from Ravenswood. I am not positive about it, however.

Q. Now, do these companies bill the gas to the Consolidated Gas Company each month?

A. Yes, sir.

Q. Does that specify the number of thousand cubic feet that are so delivered?

A. If the bill itself does not so specify, a memorandum accompanying it does.

Q. Is the cost of the production of that gas charged against the Consolidated Gas Company?

A. It is included in the charge against the Consolidated Gas Company.

Q. That is, there is a certain percentage allowed in addition to the cost, is that right?

A. Yes, sir.

By Mr. MATHEWSON:

Q. Just what do you mean by that? Is not this delivered under the agency agreements?

A. Yes, it is delivered under the agency agreements and we pay them for labor and materials that they employ in the manufactur-

ing of it, and we allow them a percentage over and above the cost to them of manufacturing it.

Q. The point is, it is all defined in the agency agreement, isn't it?

A. All defined in the agency agreement of course.

660 Q. There is nothing in addition to what the agency agreements provide?

A. Nothing.

By Mr. PAGE:

Q. Who fixes the amount of gas that is chargeable against the Consolidated Gas Company? I mean the number of thousand cubic feet that have been delivered?

A. Their statement indicates the quantity that they have manufactured for us, and we have their original records to employ in confirming these figures if at any time we question their accuracy.

Q. Who is it that makes out these statements?

A. The individual?

Q. Yes, in each company.

A. I don't know.

Q. They are made out in the office of the other company, are they not?

A. They are made out in the offices of the other companies.

Q. That man would not have access to the books of the Consolidated Gas Company, would he?

A. No, sir.

Q. There is an item here of street lamps, $285,701.13. That item I believe you stated was for the care and maintenance of the street lamps?

A. No, I testified that the cost of the care and maintenance of street lamps was included in that item.

Q. Within the last two years there have been a great many mantle burners put on the street lamps, have there not, in the City of New York?

A. There have, yes, sir.

Q. As to the care of those, have you a contract with any company?

A. The maintenance of the Welsbach lamps is taken care of by the Welsbach Street Lighting Company.

Q. Under a contract with you?

A. If there is not a contract covering the present period, there is an agreement.

661 Q. An agreement extending the contract for some previous period?

A. Some previous contract.

Q. Will you produce that contract?

A. I can do so.

Q. Well, will you?

Mr. MATHEWSON: What is the materiality, Senator?

Mr. PAGE: It seems to me it is material on this very item you have put in here, street lamps, $285,701.13.

Mr. MATHEWSON: All right. Do you want it produced?

Mr. PAGE: Yes.

Mr. MATHEWSON: I will see what it is.

Q. What else is there in that besides the maintenance and repairs of street lamps in that item?

A. Well, you are naming the other thing that is in there; I have not named it before; that is the repairs of street lamps, the cost of any repairing that is done is charged against that account and the amount received from the city is credited to it.

Q. This is not a debit balance of that account.

A. That is the debit balance of that account.

Q. You mean you spent $285,701.13 more than you received from the city?

A. More than we received *for* the city for repairing lamp posts. The contract with the city for the maintenance of gas lamps and supplying gas is at so much per lamp per annum, and it does not include any repairs. There is a separate contract for the repairs, stipulating the amount to be charged the city for each class of repairs, and as that repairing is done the cost of the work and labor and material is charged against this account, and the bill that is rendered the city for such repairs is a credit to this account.

662 Q. And $285,701.13 is the amount you expended in the nominal year ending October 31, 1905, more than you received from the city or charged to the city for that service, is that as I understand your statement?

A. More than we charged to the city, for we received nothing.

Q. I suppose that account will be in the operating ledger that you are going to produce, will it?

A. Yes, sir.

By Mr. MATHEWSON:

Q. You mean by that that the street lighting has not been paid for for that period?

A. It has not been; no, sir. Nor for the repairing.

By Mr. GANS:

Q. There is a charge against the city that you hope to collect some day, isn't there?

A. Yes, we hope to collect it.

By Mr. MATHEWSON:

Q. And while I think of it, in the statement of receipts, Exhibits 95 and 96 have you included in your receipts money charged to the city on account of lighting, as though it had been actually received by you?

A. Yes, sir.

Q. So you have stated your receipts really much larger than the amount of cash that has actually come in?

A. We do not state it as receipts, which would be rather misleading. We state it as earnings which would include the bills rendered though not paid.

Q. That applies to Exhibits 95 and 96?

A. That is the case, yes, sir.

By Mr. PAGE:

Q. Have you the segregation of the item of taxes that I asked you for?

A. Yes, sir.

663 Mr. MATHEWSON: That was for the calendar year 1905, the segregation of taxes.

The WITNESS: Yes.

Mr. PAGE: The segregation of taxes of the item on Exhibit 94.

(Paper produced by witness.)

Mr. PAGE: I will offer that in evidence as a statement of the details of the $965,843.88.

Paper received and marked State Exhibit E.

Q. I notice an item of $94,506.29 as an item of interest on accrued taxes, is that right?

A. That is correct, yes, sir.

Q. What taxes are those?

A. Taxes accrued and unpaid as of December 31st, 1904, which remained unpaid December 31st, 1905; also the interest that accrued on the taxes that were due December 31st, 1904, and paid during 1905.

Q. Do you know to what particular tax that relates, or does it relate to all the taxes?

A. It relates to all taxes unpaid as of the 31st of December, 1904.

Q. Well, you don't remember what taxes were unpaid?

A. I could probably indicate the principal items as special franchise taxes and personal taxes.

Q. That was the interest that was charged as a penalty for nonpayment of the tax, wasn't it?

A. It is interest that——

Q. It is not part of the tax itself?

A. No, it is no part of the tax itself; interest that we will have to pay ultimately when the taxes are settled.

Q. The State tax, $195,795.50, is that tax imposed upon the rate of dividend paid?

A. And upon the gross earnings.

Q. And that is upon a capitalization of $80,000,000.00?

A. It has nothing to do with the capitalization.

664 Q. Well, that is that particular tax, is it not, the State tax that is imposed upon the corporation, based upon its amount of dividends and the gross earnings, you say?

A. Yes, sir.

Recess until 2:15 P. M.

After Recess.

ROBERT A. CARTER—resumed.

Cross-examination by Mr. PAGE continued:

Q. The amounts stated on State's Exhibit E, "taxes for the year 1905, real estate $179,778.95, personal property," &c., are they the face of the bills or the face of the assessment against you?

A. The face of the assessment against us, yes, sir.

Q. Without any allowance for prompt payment if prompt payment had been made, or without any charge for penalties if penalties were incurred?

A. The face of the bill, yes, sir.

Q. Are these items that have been paid during the year?

A. The statement includes items that were paid during the year.

Q. I gathered from your statement before that the personal property and the special franchise taxes had not been paid.

A. They were not paid, nor was the state tax paid during the year. During the year we paid a state tax for the preceding year but the bills were not rendered early enough in the year to pay within the calendar year.

Q. Have those been paid since the first of the year, if you know?

A. The state tax is payable on or before the 15th day of January and was paid about that time. The real estate taxes, I believe, have all been paid. The personal property tax for the year 1905
665 was paid. The special franchise tax, I think, is the only tax for that year that has not now been paid.

Q. And you are testing that, are you, in the courts?

A. We are, yes, sir.

The MASTER: Let it appear of record that the witness has produced here the operating ledger for 1905.

The operating ledger for 1905 is marked for identification, Complainant's Exhibit 97.

By Mr. MATHEWSON:

Q. Are you right in supposing that in any year, say 1905, only the taxes are charged in the operating expenses for that year which were assessed and accrued for 1905?

A. That is the case.

Q. No 1904 taxes or 1903 taxes?

A. No. Although they may have been paid in that year they do not appear as a charge in that year against the expenses.

Q. They were charged in the year in which they accrued?

A. They were charged in the year in which they accrued.

Q. So, too, as to any amount of interest charged in the operating expenses of 1905, is that interest that accrued wholly within the year 1905?

A. Within the year 1905.

By Mr. GANS:

Q. Can you amplify this statement (referring to State's Exhibit E) by reference to your books, by showing the amount of interest which accrued upon each one of these items which go to make up the total amount of $94,506.29?

A. (No answer.)

Q. Can you tell us by reference to your ledger how that amount of $94,506.29 is to be apportioned among the various items
666 of taxes which go to make up the total of $871,337.59?

A. No, I cannot, because none of it applies to the taxes

that were assessed during 1905 and paid during 1905, because no interest accrued upon them.

By Mr. MATHEWSON:

Q. That was interest which accrued within the year 1905 upon taxes of previous years before their settlement?

A. Precisely.

By Mr. GANS:

Q. Can you tell us how the item of State tax of $195,795.50 was arrived at?

A. It is the amount of the bill rendered by the State Comptroller, calculated to the best of my recollection on the basis of one-half of one per cent. of our gross receipts, and three per cent. upon the dividends paid during the year in excess of four per cent. upon the capital stock.

Q. Now could you tell us what the gross receipts were assessed at for the purpose of the fixing of that tax?

A. From memory I could not. The gross receipts upon which that tax was computed is a matter of record and was something in excess of any gross receipts shown in our statement here, because it included the receipts from the sale of residuals, which appear as credits in our operating expenses instead of as revenue.

Q. Did it include the receipts from securities?

A. My impression is that it did.

Q. Does the bill of the State Comptroller contain a statement of the gross amount upon which that was assessed?

A. I am not sure that it does. The information is obtained by the State Comptroller from the company. A report is made to the State Comptroller on or about the first of October of each year
667 of the gross receipts for the nominal year ending October 1st, and that furnishes the basis of the bill that they render us. We also inform them in that statement of the dividends that have been paid during the year, upon which also they calculate a tax of three per cent. upon the dividends paid in excess of four per cent.

Q. Can you tell us whether this dividend was assessed in conformity with the amount specified in your report?

A. It was.

Q. So if we got that report we would have the basis of that assessment?

A. Of that assessment, yes, sir.

By Mr. PAGE:

Q. Now will you kindly turn to the street lamps account for 1905?

A. There is the street lamp account for the Hester Street branch for the year 1905, being on pages 601 to 607 inclusive (of Complainant's Exhibit for Identification No. 97).

Q. The Hester Street branch for the year 1905 showed charges against the street lamp account of how much?

A. $48,259.67.

Q. And a credit of how much?

A. Well, that is the net debit for the year.

By Mr. GANS:

Q. What does this item of the same amount on the credit side of the account mean?

A. That is carried to profit and loss account.

By Mr. PAGE:

Q. It is entirely a debit account, then?

A. Yes, sir.

Q. And there are no credits in this?

A. No credits whatever.

Q. Where would the credits be?

668 A. Well, there are credits in there of course but not shown separately. The credit would be an item—there for example (indicating on page 607 of Complainant's Exhibit for Identification No. 97) amounting to $1,465.34, which would represent the charge to the city for repairs made to the posts during the month of December.

Q. Now the debit side of this account, does that represent the moneys that you paid out on account of the street lamps?

A. Yes, sir.

Q. Does it represent the installation of new street lamps as well as repairs?

A. Yes, sir.

Q. Where would appear the money which you received, or, if you have not received the money, the credit of the amount paid by the city for this work?

A. In the gas sales account.

Q. And will you turn to that account and show me where that item appears?

A. It would not appear separately. It would be included in the total amount for each month. Here it is, one amount which represents our entire sales for the year (indicating on page 719 of Complainant's Exhibit for Identification No. 97). There may be some item of something more than one thousand dollars by which the total amount of sales, as shown by this account has been reduced from $13,553,802.97 to $13,552,482.97.

Q. Well, if there was any such item it would appear on that account, wouldn't it?

Mr. GANS: And it would appear on Exhibit 95 or 96.

A. (No answer.)

Q. Exhibit 97 for identification, under Gas Sales, is supposed to state the entire moneys received by your company for gas sales during the year 1905, isn't it?

A. Yes, sir.

669 Q. But on page 719 of Complainant's Exhibit 97 for identification that amount is stated at $13,553,802.97; is that right?

A. There is a difference of $1,400 that I am not able to explain at the moment, and it would probably take a long time for me to hunt it up here, but I will make a note of it.

Q. Would your journal show the amount that was charged there

as against the city for repairs and maintenance to street lamps as connected with any of the entries in your ledger?

A. No, sir, there is no such charge made against the city separately. The city is charged so much per lamp per annum, the price of the Welsbach lamp differing from that of the ordinary flat flame burners. That charge includes the maintenance and there is no division made of it.

By Mr. GANS:

Q. Is there any record of it under one thousand feet charged against the City?

A. No record other than a monthly estimate of what the lamps have consumed; the gas is not metered.

Q. Have you an account on the ledger with the City for street lamps, or gas furnished, or whatever shape the account is kept in?

A. The account against the city would be included in the account in this ledger called "Sundry Debtors."

Q. Well, will you turn to the Sundry Debtor account?

A. Yes, sir (turns to page 151 of Complainant's Exhibit 97 for identification).

Q. Turn to the Sundry Debtor account, page 151. Will you point out the items or charges against the city?

A. I am not able to do so, as the total amount charged against all sundry debtors is posted in here in a single entry.

Q. That is journalized, I suppose?

A. Not showing the individual sundry debtors, of whom I presume we may have a considerable number.

670 By Mr. GANS:

Q. Is there not some book in which it does appear?

A. The sundry debtor ledger would show it.

By Mr. PAGE:

Q. There must be a book somewhere or an account somewhere from which you make up your bill against the city?

A. The sundry debtor ledger would show the amount charged against the city every month. Their account would stand out in that ledger by itself.

Mr. GANS: In order to have that amount I suppose we will have to have the book.

Q. Where do you get the record of gas sold? Is that in the books, the amount of gas sold, as stated on Exhibit 94?

A. That is the amount sold (turns to page 719).

Q. That is the amount received for gas?

A. No, I beg your pardon.

Q. That is expressed in dollars, is it not?

A. It is expressed in dollars, but it is the amount of bills rendered to consumers.

Q. Where will you get the amount expressed in cubic feet, which is stated in Exhibit 94 as being 13,283,163,767?

A. The record of that is kept in a book designed for the purpose,

which is written up from monthly reports from the various offices, from the amounts recorded in the consumers' ledger.

Q. If that amount is correctly stated the amount received would be a larger amount than at the rate of $1.00 per thousand cubic feet. Would that difference be the credit which would be received for the maintenance and care of street lamps, or what makes that difference?

A. Assuming that all the gas that we sell to consumers was sold for $1.00, the average price of all the sales would be $1.00.

671 If the total quantity sold, applied to the total amount of sales, indicated a higher rate, it would indicate, as it would, that the bill to the city includes this maintenance.

Q. Are there any of your consumers that you sell gas to at less than $1.00?

A. Yes, we sell gas to the city at less than a dollar.

Q. Outside of the City of New York?

A. No, none that we sell to at less than $1.00, outside of the City of New York.

Q. Then, could we arrive at the amount that would be received and properly applicable to the street lamp department by deducting 13,283,163,767 from $13,553,802.97?

A. No, I should say not.

Q. Why?

A. Because some of the revenue included in the amount named by you, $13,553,802.97, represents revenue from gas sales to the city at lower than $1.00.

Q. Except for that fact, your answer would be yes, would it?

A. No, it would not be yes, because that would assume that the amount that we paid for labor and material in repairing the street lamp-posts owned by the city exactly equals the amount which we charge them for that work at a given rate under our contract with them.

Q. I do not see how that would follow, Mr. Carter. I said that it would represent the amount that you received that would be applicable to that account, not that it would balance it?

A. I think you might so apply it. On the same theory, though, we might apply all our expenses against our revenue and say that the balance represented our revenue, instead of recording the revenue at the gross amount, as we are accustomed to do.

Q. But I understood you to testify that this account of gas sales on page 719 of your ledger included the gas sales and the amount charged against the City for maintenance and repairs of street

672 lamps; is that correct?

A. That is the case, and our bills against our other consumers include the cost of supplying them with gas; making it and selling it to them.

By Mr. MATHEWSON:

Q. And taking care of their apparatus, as far as you do?

A. Yes, taking care of their apparatus, furnishing them with burners, and clearing their services, and rendering such service as is necessary to maintain a good supply of gas.

By Mr. PAGE:

Q. Does that all appear in this account of Gas Sales?

A. All the expense that I have reference to appears in our expense account where it belongs, and where, we think, also belongs the expense of maintaining the lamp posts.

Q. Does the cost of maintaining the lamp posts appear in your expense account?

A. It does.

Q. Turn to it, please, and point it out.

A. It is included in the account entitled "Street Lamp Account."

Q. Now, do your other customers pay you, and is it entered in the account of gas sales, for tips, and for the care of and keeping the apparatus in order, that you have just spoken of?

A. No, there is no purpose in doing it. We call it the Street Lamp Account because it pertains to street lamps.

Q. But you stated that it would be just as proper to charge for tips and a number of other things that you did?

A. It seems to me it would be just as proper to divide the amount we charge our customers between certain expense account and the revenue account as to pursue that policy with respect to the bills we render to the city.

673 Q. I am not asking for a theoretical method of keeping books, or what would be a good way to keep books, but I would like to know and I would like an explanation of the difference between the total of your gas sales of $13,283,163.97 and the total of your gas made, 13,283,163,767.

A. You have these figures there; I dare say you can arrive at it; I do not know what it is.

By Mr. GANS:

Q. There is a difference there of $270,635.20.

A. I will accept your figures as being correct.

By Mr. PAGE:

Q. You can verify them if you wish.

A. I do not want to.

Q. And you do not know how that difference arises. Is that the way you wish it left in the record?

A. No, I have already testified as to how it might arise.

Q. It is not a question as to how it might arise. Do you know what makes that difference?

A. It is contributed to largely, if not entirely, by the bills to the city for lighting, maintaining and furnishing gas for city lamps.

By Mr. GANS:

Q. Is it not contributed to entirely by that?

A. I think perhaps it is contributed to entirely. I am willing to testify that it is contributed to entirely by that.

By Mr. PAGE:

Q. Outside of the Welsbach lamps is there not a charge based on the estimated amount of gas that is consumed?

A. A charge based on the estimated amount of gas?
Q. Yes.
A. Of what nature?
674 Q. Well, you assume that your ordinary flat flame burner burns four feet an hour, and that it burns a certain number of hours; if you multiply that certain number of hours by four feet you arrive at the amount that that lamp is supposed to consume; is that right?
A. Yes, that is no charge, but an estimate.
Q. And then you charge that against the city at the rate of 90 cents, don't you?
A. No, we do not; you are referring to lamp posts now, or supplying gas to posts, lamp posts?
Q. Yes.
A. No, we do not.
Mr. MATHEWSON: You are referring now to the year 1905?
The WITNESS: Of course.
Mr. MATHEWSON: The city, you know, recently adopted a method of metering certain lamp posts, I think, or something like that. It may be a little different.

By Mr. GANS:

Q. Is there not gas supplied to the city that is metered for which you charge ninety cents, or did you in the year 1905?
A. Yes, we did in the year 1905; we metered gas supplied to the city and billed it at ninety cents per thousand cubic feet.
Q. Is there any record from which the amount of gas so charged to the city can be definitely ascertained?
A. Yes.
Mr. MATHEWSON: That was in public buildings?
The WITNESS: That was in public buildings.
Mr. MATHEWSON: And not for lamps?
The WITNESS: Yes, I understand that.
675 Q. That is included of course in this gas sold, 13,283,163,767?
A. Yes.
Q. Have you the record with you from which it can be ascertained?
A. No, I have not.
Q. In what book would that be contained?
A. In our general office consumers' ledger, which is the ledger recording the bills rendered to the city departments.
Q. That ledger I suppose has headings for each customer?
A. Headings for each customer.
Q. And the city would appear there?
A. It would appear there as a customer.
Q. Under the headings of the separate departments?
A. The headings of the separate departments.

Mr. GANS: It is agreed that Mr. Carter will furnish us with a statement from the ledger showing the amount of gas billed to the

city at ninety cents, which is to be taken subject to verification in the usual way?

Mr. MATHEWSON: Yes.

By Mr. PAGE:

Q. The amount of gas that goes into street lamps is included in this 13,283,163,767?

A. Yes, an estimated quantity.

By Mr. GANS:

Q. May I ask how you arrive at that estimate?

A. It is based upon an assumed supply of three cubic feet per hour for lamps burning 3,925 hours per annum.

By Mr. MATHEWSON:

Q. State why you make that assumption of three cubic feet per hour?

676 A. Because for a number of years the contracts with the city have stipulated that that quantity of gas should be supplied. We have reason to believe, however, that the quantity has exceeded that from 25 to 50 per cent.

By Mr. GANS:

Q. Then, does there appear anywhere the aggregate amount of that estimate for the year 1905?

A. Yes, sir.

Q. Have you the figure in mind?

A. No, not in mind; it is a matter of record.

Q. In what book is that contained?

A. In the record of sales.

By Mr. MATHEWSON:

Q. You can state that also, or you can procure it?

A. I can obtain that information, the amount of gas estimated which we have supplied to street lamps for the year 1905.

Q. At the rate provided by the city contracts?

A. Yes.

Q. Three cubic feet?

A. Yes.

By Mr. PAGE:

Q. Now, will you give me the totals of your street lamp account for the different stations, starting with Hester Street?

A. Hester Street department, $48,259.67; Sixty-sixth Street department, $49,025.03; 111th Street, $191,974.39; a total of $289,259.09.

Q. There seems to be in this account certain items of other gas companies; the Westchester Lighting Company, the Central Union and Northern Union; what is the explanation of that?

A. They supply gas to some street lamps which under our contract with the city we are obliged to light and maintain.

Q. And the repairs on those lights enter into part of the
677 charge on this account?

A. No, repairs on those lamps are made by those companies and they bill for them direct.

Q. How do they get in your books?

A. They supply the gas and charge us for it.

By Mr. GANS:

Q. Is that gas so supplied to street lamps included in the amount of gas given on Exhibit 94 as the amount bought from those companies?

A. Yes, sir.

Q. Or is that in addition to that amount?

A. No, it is included. But one moment, I guess I will have to correct that testimony in respect to gas. Any gas furnished would be included in this gas purchased; it would be rather for labor performed in connection with the lamps for which we pay them, and inspecting and some other work which they do not recover anything from the city for doing; comparatively small charges.

By Mr. PAGE:

Q. Well, is the gas that is furnished to those street lamps billed by you against the city or by the Central Union, Northern Union and Westchester Lighting Company?

A. We bill the city for the lighting, cleaning and glazing, maintaining and furnishing gas for the lamps under our contract with the city.

Q. And then do you——

A. And we pay them for what gas they furnish and for any labor they may perform in connection with the lamps.

Q. And is that gas part of this gas sold and made at other stations made under agency agreements?

A. That is the case.

Q. Is that the amount of gas that is adjusted under the
678 agency agreement or the amount that is adjusted on the fifty-cent basis?

A. Under the agency agreement.

By Mr. MATHEWSON:

Q. Do you remember whether there is any agency agreement with the Central Union?

A. I think there is. I may be wrong about that, but I am assuming that there is.

Q. Will you make a note about that and ascertain?

A. I will.

By Mr. GANS:

Q. I thought the testimony was that there was not any written agreement but there was an agreement?

A. A verbal agreement, I think that is the case.

Mr. MATHEWSON: I referred to a written agreement. I had in mind that there was not, but I may be wrong about it.

By Mr. PAGE:

Q. Now, the Welsbach Lighting Company figures here each month. What is that?

A. That is the bill they render us for the maintenance of the street lamps which are equipped with Welsbach mantel burners.

By Mr. MATHEWSON:

Q. And which Welsbach lights you furnish to the city under contract?

A. They are furnished by us to the city under contract.

By Mr. PAGE:

Q. Now, if you will turn to the account of expense which
679 totals $490,855.36, that is just below total cost of holding on Exhibit 94?

A. One of the accounts, Senator, begins at page 349 and runs to page 357, inclusive.

Q. Now, will you give us the details of that by stations?

A. Yes.

Mr. MATHEWSON: What is this, station expense?

The WITNESS: This is branch office expense.

Hester St.	$78,362.23
Irving Place	115,500.35
42d Street	97,275.48
Third Ave.	132,801.16
Hester St., Meter Shop	9,969.00
Avenue A, Meter Shop	11,184.91
66th St., Meter Shop	11,544.86
114th St., Meter Shop	15,369.81
Meter Repair Shop	3,093.60
Hester St., Street Department	5,467.17
66th St., Street Department	4,879.41
111th St., Street Department	5,407.38

The total should be $490,855.36 to agree with the statement, Exhibit 94.

Q. What are those meter shops you refer to?

A. Fitting shops, each shop being equipped with a foreman and clerk and gang of men and material and supplies for looking after the requirements of customers, setting and bringing in meters, locking and unlocking them and attending to complaints and work of that nature and putting on burners, clearing consumers house pipes.

Q. Are those the shops at which the repairs are made to meters?

A. No, sir, they are fitting shops; the repairs are made at the meter repair shops.

Q. The expenses of some of the meter repair shops are included in this statement, aren't they?

680 A. Yes, one meter repair shop only is included in that statement; we have but one meter repair shop.

By Mr. PAGE:

Q. And the expenses of that shop are included in this expense account, is that right?

A. Yes, sir.

Q. Now, if you will turn to the expense, general office, $339,999.51?

A. The account begins on page 409 and runs to page 428, from which it is transferred to page 438 and runs to page 439 and transferred to page 441, where it closed for the year.

Q. And what is the total of that?

A. $248,986.23. The item in the expense statement Exhibit 94, under the head Expense general office includes besides the amount given the cost of new business carried on folios beginning with 429 and extending to 437 and transferred to 440 where it is closed, the total expenditures for the year aggregating $60,575.28. It also includes an item, claims for damages, which account appears on pages 162 and 163 of the operating ledger, and indicates an expenditure for the year of $30,438. Those three items combined amount to $339,999.51, being the item so called appearing in Exhibit 94.

Q. Now, will you explain what is the aggregate of these claims for damages that are brought in as a part of the general office expense account?

A. Settlement of damage proceedings, or settlements in anticipation of proceedings arising from personal injuries, or injury to property; accidents of some nature or other.

Q. And does that include also your lawyer's bills?

A. No lawyer's bills are included in there whatever. There may be payments there through lawyers to claimants, but no legal expense is included.

Q. What is this account for new business, what do you carry into that account?

A. Advertising and a variety of expenses of that kind. The operating of our fuel and appliance department, the paying of
681 canvassers for new business, or for the sale of appliances, and any expenditures that are of a nature designed to bring additional business to the company are charged to that account.

Q. But you have also an advertising account, haven't you?

A. Well, there may be some special advertising, not of a new business kind particularly, I don't know what it may be, dividend notices or something different from the new business account. I should have to analyze the account to state just wherein they differ.

Q. This account for damages means the money is actually paid out for damages or are there any contingent liabilities included in there?

A. No, it is money actually paid out, Senator, in every case.

Q. Now, we have one other expense account I should like to have you turn to (indicating).

A. That is station expense.

Q. Well, I suppose so.

A. That item of expense included among the station disbursements in Exhibit 94 includes the salaries, the incidental expenses at

the manufacturing stations. If you would like to check that I would be glad to turn the account and give you the totals for each year.

Mr. MATHEWSON: What is the amount?

A. The total amount shown in Exhibit 94 is $59,016.97.

Q. The pay roll as mentioned on this account at pages 293 is what, what pay roll?

A. It is the pay roll of that particular station, the Fourteenth street station.

Q. Does that include the men in the manufacturing department or is it only in the office?

A. Only in the office.

Q. It is the pay roll then of the office force?

A. Of the office force at the station.

Q. And the superintendent, does he come in there?

A. No, it would appear under the heading of Superintend-
682 ents, I believe, among the items of station expense independently of that. The item there is Labor, but Station Superintendents is an item in there unless I am very much mistaken.

The WITNESS: Shall I call off the items, Senator?

Q. Yes, you might.

A. —

14th Street Station	$10,067.74
21st Street Station	20,733.99
42d Street Station	11,312.29
44th Street Station	8,580.55
99th Street Station	8,322.40
Total	$59,016.97

Q. Now will you turn to you- coke account?

A. Page 185 of Complainant's Exhibit 97 for Identification gives the coke account of the 14th Street station.

Q. Now will you explain this account. It shows gas production debited with $19,208.35?

A. No, gas production is not debited. The 14th Street station coke account is debited and gas production account would be credited with $19,208.35.

Q. What is the gas production account, what do you mean by that?

A. The gas production account is the account in this operating ledger in which we carry the cost of manufacturing gas.

Q. What has that to do with the coke account?

A. The coke account is a very important item in the manufacture of gas, whether it appears as a residual or whether it figures as an item of fuel.

Q. No, but this being the coke account why should gas production be credited with that? Is that the value of the coke?

A. That is the value of the coke that was produced at the 14th Street station for sale. The gas production account which is charged

with the coal that is used is credited with the coke that is
683 produced for sale and that is the entry by which it is done.
The gas production account would show a corresponding credit.

By Mr. GANS:

Q. Then the amount of credit to this account——

A. Would be through the sundry debtors for such coke as was delivered to the National Coke & Coal Company. They would be charged up as sundry debtors for the coke delivered to them, and through the journal this coke would be credited and they would be charged—or the sundry debtors' account would be charged with the amount of the bill against them for the month.

Q. Then am I wrong in this, that the gas production debit amounts practically to this, that instead of closing this account into profit and loss you close it into gas production?

A. This is a stock account, and shows the value of the coke on hand, in stock, at the end of each month. We started the beginning of the year, January, with a stock of coke valued at $8,553.75. We charged the coke account with the coke that was produced for sale during the month, credited it with the coke that was used, transferred to water gas stations and sold to the National Coa' & Coke Company, and it left a balance of coke on hand at the end of the month, valued at $8,088.50.

By Mr. PAGE:

Q. What did I understand you to say the sundries were?

A. Transfers to water gas stations, I should say, without having the original here. The next item, $2,049.75, appearing as a credit item in the 14th Street coke account on page 185 of the operating
ledger, is coke used for other purposes than for gas manufac-
684 ture, but used by the company in other departments. The
$6,505.22, appearing in the same account as a credit item is the value of the coke which was transferred to the water gas stations in the month of January, 1905.

By Mr. GANS:

Q. Could you tell us whether that same explanation will apply to the corresponding items in each month? There seem to be corresponding items in each month, don't there?

A. (No answer.)

By Mr. PAGE:

Q. In all the months except the month of January there appears to be an item of coke; what does that mean?

A. The same would be here put in as sundries; that is, in January one of those items would be coke and might properly be so-called because it represents identically the same thing. The coke account at some other station is charged, and the coke account at the 14th Street station is credited. You will observe that that takes care of that credit. That means that that amount represents the value of coke

transferred from the 14th Street station to the water gas station, and every month where that item appears coke is charged against the water gas station, and credited against the coal gas station. The sundries are the various other purposes than for manufacturing purposes for which the coke was used during the month, and the credit indicated in the coke account of the coal gas station.

By Mr. GANS:

Q. Take in January the first item which appears under Sundries is the item representing the amount of coke used for purposes other than gasmaking?

685 & 686 A. That is the case, unquestionably. The larger amount is the coke used in manufacture; the smaller amount being always the coke used for other purposes.

By Mr. MATHEWSON:

Q. What do you mean by "other purposes" when you say used for other purposes than manufacture?

A. Why, it is used under boilers for producing steam which is not used in connection with the manufacture of gas, it is used by the Street Department as fuel in preference to other kinds of fuel.

Q. My point is this, it is used in connection with the business of manufacturing and distributing gas somewhere?

A. Yes, if it is not used in connection with manufacturing it is used in connection with distributing gas.

By Mr. PAGE:

Q. Where is the account with the National Coke and Coal Company. Is it in this ledger?

A. No, it is not. The National Coke and Coal Company we figure as sundry debtors, and their account would appear in the Sundry Debtors' ledger. In this ledger their account would simply be lumped with others in a General Sundry Debtor account. If you want to know what amount we charge the National Coke and Coal Company with each month in the year, there is no other way of doing it.

The MASTER: You want that book also for the account against the City, didn't you say?

Mr. GANS: Yes, sir.

At 4:15 P. M. adjourned to August 10, 1906, at 11 A. M.

Last Exhibits:

Complainant's, 97.
State's, E.
City's, 1.

687 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERIC E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *August* 10, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Page, Mr. Mathewson, Mr. Gans, Mr. Burr.

688 ROBERT A. CARTER—Cross-examination continued:

The witness reads into the record a statement of the value of coke produced by the company other than used in coal gas works, subdivided into: Amounts sold, amounts delivered to water gas plants, and amounts used in departments of the company's works other than the manufacturing department.

The WITNESS: I take this statement from page 185 of Complainant's Exhibit 97 for identification. I suggest that the statement be divided into four columns: First, produced for sale; second, delivered to water gas stations; third, used in other than manufacturing departments; and fourth, sold.

Fourteenth Street Station.

	Produced for sale.	Delivered to W. G. stations.	Used in other than Manfg. Dept.	Sold.
Jan	19,208.35	6,505.22	2,049.15	11,118.63
Feb	16,570.19	4,070.32	1,938.70	10,557.17
March	16,802.76	7,141.18	1,125.60	11,521.73
April	17,165.43	9,399.59	544.59	8,425.50
May	14,361.35	3,871.77	520.27	10,505.56
June	13,745.49	3,121.78	141.75	10,955.21
July	12,666.44	2,023.92	105.32	9,986.20
Aug	11,616.22	2,327.82	107.32	10,396.83
Sept	12,152.34	2,208.49	104.23	9,412.87
Oct	13,360.30	2,252.95	142.50	9,476.10
Nov	13,621.43	2,182.77	151.61	10,681.80
Dec	14,059.01	1,390.52	572.00	12,791.74

Q. This account upon this book, at page 185 of Complainant's Exhibit 97 for identification, starts with an entry on the debit side of $8,553.75, does it not?

A. It does.

689 Q. That is, the entry is "Balance is $8,553.75"?

A. That is correct.

Q. And it is closed with an entry on the debit side which is also a balance entry?

A. A balance entry.

Q. Of $2,943.75?

A. That is the case, yes, sir.

Q. Now, will you turn to the account of the 42nd Street station in this same exhibit?

A. Yes (reads similar statement).

Forty-second Street Station.

	Produced for sale.	Del. to water gas stations.	Used in other than Manuf. Dept.	Sold.
Jan	16,784.55	1,629.97	965.25	13,149.83
Feb	14,189.76	1,486.01	963.00	13,390.00
March	16,350.45	1,602.40	1,341.00	13,508.30
April	14,338.38	3,224.29	202.75	11,737.09
May	12,589.71	2,324.79	150.75	12,132.42
June	12,102.11	1,927.44	220.75	10,770.67
July	11,382.24	2,345.04	163.12	10,820.33
Aug	12,452.84	1,973.81	128.25	11,743.53
Sept	13,080.82	1,256.22	247.50	11,979.85
Oct	14,101.30		204.75	13,893.35
Nov	13,236.40		229.50	13,006.90
Dec	13,473.04		1,023.75	11,450.29

Q. This account starts with a debit balance of $8,113.50, does it not?

A. It does, yes.

Q. And ends with a debit balance of $999, does it not?

A. Yes.

Q. And referring to each of the two accounts, namely, the account of the 14th Street station and the account of the 42nd Street station, the debit items are those comprising the first columns which you read off in each instance, and the balances as testified to, and the credit items consisting of the other columns; and, in the case of

690 the 14th Street station, the balance as testified to?

A. That is the case.

Q. Of course the credit and debit balances of these accounts should balance?

A. Taking into account the variation in the balance at the beginning and the end of the year.

Q. Now, will you turn to the coke account with the various water stations?

A. Yes (refers to page 187 of Complainant's Exhibit 97 for identification).

Q. The statement you are about to read is a statement of further distribution of coke received from coal gas stations and delivered to water gas stations, as shown by the accounts of the several water gas stations?

A. Yes, sir. The sub-headings will show.

Twenty-first Street Station.

1st. The value of the coke received from coal gas stations.
2nd. The value of the coke used as fuel in gas manufacture.
3d. The coke used for other purposes than gas manufacture at water stations or elsewhere.

January	6,505.22	5,694.77	797.98
February	3,893.98	3,855.73	
March	7,141.18	7,113.68	
April	9,070.40	8,969.15	
May	3,871.77	4,047.65	
June	3,121.78	3,122.16	
July	2,023.92	2,016.41	
August	2,327.82	2,334.57	
September	2,208.49	2,208.49	
October	2,252.95	2,250.70	
November	2,182.77	2,173.77	
December	1 390.52	1,381.52	

691 The debit balance at the beginning of the year is $5.53. The debit balance at the end of the year is $24.75.

Q. In each case a debit balance?

A. Yes.

Forty-fourth Street Station.

1st. The value of the coke received from coal gas stations.
2nd. The value of the coke used as fuel in gas manufacture.
3d. The coke used for other purposes than gas manufacture at water stations or elsewhere.

January	1,629.97	1,360.10
February	1,486.01	1,603.96
March	1,602.40	1,483.78
April	3,224.29	3,126.17
May	2,324.79	2,551.11
June	1,927.44	2,009.64
July	2,345.04	2,331.88
August	1,973.81	1,725.13
September	1,256.22	1,772.94
October		141.52

The balance at the beginning of the year is $336.26.

Q. This account covers the months from January to October, inclusive?

A. Yes.

Q. And there is no entry on it for November or December?

A. No entry for November or December.

Q. And no balance at the end of the year?

A. No balance at the end of that period.

Q. Is this account closed in any way?

A. It closed itself by the last credit of $141.72.

692 *Ninety-ninth Street Station.*

1st. The value of the coke received from coal gas stations.

2nd. The value of the coke used as fuel in gas manufacture.

3d. The coke used for other purposes than gas manufacture at water stations or elsewhere.

January	.....	149.47	
February	176.34	98.31	
March	.....	92.48	19.70
April	329.19	70.75	2.80
May	.....	39.46	20.50
June	.....	67.64	32.80
July	.....	49.89	24.70
August	.....	54.84	32.85
September	.....	69.42	10.75

The account opens with a debit balance of $330.83 and closes without any balance.

Q. Now, will you take up the Eighteenth Street station?

A. Yes. Accounting for the value of the coke on hand at that station of January 1st, 1905, the station is not manufacturing gas, and each month shows a credit, accounting for certain loss in the value of the stock because of its being converted, in the course of handling and piling, to screenings. That simply decreases the value at which it was originally carried and at that amount it was carried to operating expense, and the loss involved in the storing of it at that point becomes a charge to the expenses. The three headings will, therefore, show the sales, the use of the coke in other departments than the manufacturing department, and the loss due to screenings.

Q. The account is, therefore, somewhat different from the others in that respect?

A. Yes.

Q. Was there any coke added to that account during the year?

A. No, sir.

693 *Eighteenth Street Station.*

1st. The value of the coke received from coal gas stations.

2nd. The value of the coke used as fuel in gas manufacture.

3d. The coke used for other purposes than gas manufacture at water stations or elsewhere.

January	2,502.25	530.75	391.50
February	2,849.70	545	519.17
March	2,508.25	442.50	272.38
April	1,675	239.75	181.12
May	292.90	220.75	145.60
June	113.05	173.75	176.70
July	131.05	161.75	139.20
August	646	909	170.75
September	1,793	217	511.13
October	1,909.23	240	106.39
November	1,827.20	399.25	169.80
December	572.95	521.50	275.80

The debit balance with which this account started on January, 1905, is $29,854.12, the debit balance with which the account was closed December 31st, 1905, is $5,373.

Q. Do I understand that the items which have entered into this third column as you have given them, have been charged off to expense account?

A. The second and third columns are charged off to expense account; the first column refers to sales of coke at that station.

Q. Now, have you covered all the water gas stations having coke accounts?

A. I have covered all water gas stations having coke accounts, and I will explain that the last station is not an operating station, and was formerly operated as a coal gas station.

694 By Mr. PAGE:

Q. In this coke account, the value of the coke is given in dollars and not by quantity?

A. That is the case.

Q. What is the factor or multiplier by which you produce the result?

A. The quantity at the price at which it is sold or delivered to the water gas station, or used in departments other than manufacturing departments.

The MASTER: He means what figures?

A. (Continuing:) I said the quantity, for one figure, and the rate at which those departments or the public would be charged for coke.

Q. Is that a varying rate?

A. Yes, for different grades of coke, and the different uses we make of it.

Mr. MATHEWSON: The witness said yesterday that the amount varied from 75 cents for coke breeze, or screenings, up to $2.00 and $3.00.

Q. But I understood this was the coke produced each month at those stations?

A. You refer now to coal gas stations?

Q. Yes, to coal gas stations.

A. The statements taken off from the 14th, 42nd and 18th Street stations show, with respect to the first two named, the value of the

coke produced for sale, and the value of the coke disposed of by either being sold or by transfer to a water gas station, or by employment in some other than the manufacturing department.

Q. The detail of that would appear on the journal, would it?

A. Yes, it would appear on the journal of the operating ledger.

Q. Now, will you turn to the entry of the journal of that first gas production, $19,208.35, at the 14th Street station.

A. I find the entry "Coke debtor to gas production ac-
695 count," in which appears coke produced for sale at the 14th Street station, amounting to $19,208.35, as shown in the operating ledger of that station.

Q. That does not show the number of tons or loads, or by what you multiply?

A. No, sir.

Q. That is what I asked. Where do you get that?

A. That is all shown on the memorandum from which this entry in the journal is made, so as not to repeat it in the journal. The entry is made in the journal in the simplest form, and would refer of course to the memoranda of the coke produced at the station.

By Mr. BURR:

Q. That is, vouchers filed for them?

A. A memorandum rather than a voucher; a memorandum or statement giving quantity, &c.

By Mr. MATHEWSON:

Q. A statement from the 14th Street station?

A. A statement from the 14th Street station is the basis of the entry.

Q. Now, where is the other figure by which you multiply?

A. That would appear in the statement also.

Q. Well, from what source would you get that information?

A. From the engineering department, from the report from the station.

Q. Then, is there not any book in which these matters are journalized?

A. They are journalized here (referring to another book).

Q. I would hardly call that a journalizing of the account?

A. Yes, it is a journalizing of the account without giving in the journal all the detail as to quantity and price.

The MASTER: Note that when the witness says "here" he refers to the journal of the operating ledger, which he has produced.

696 The WITNESS: Yes, I will say, Senator, that if you would like to have a great deal of detail respecting that entry, I can furnish it without any trouble whatever. It simply avoids spreading what is already a matter of record and available all over this book again the second time.

By Mr. MATHEWSON:

Q. By "this book" you refer to the journal?

A. Yes.

By Mr. PAGE:

Q. With reference to that item in the journal, I notice that you have two sets of postings; that is, this 185 and 188 refer to the pages of the operating ledger. What are the others, 225 and 231; to what do they refer?

A. To the gas production account in the operating ledger. The item appears on page 225 of the operating ledger under the heading "Gas Production Account, 14th Street Station," $19,208.35, corresponding with the amount with which the coke account is charged on page 185 of the operating ledger.

Q. There is nothing on the books of the company then, which will show what price you received per unit, either a ton or load of coke?

A. Oh, yes, if we bill the National Coal & Coke Company for coke, we bill them for so many tons at a price, and the transaction is a matter of record on the company's books, the charge appearing against the National Coal & Coke Company in the sundry debtors ledger, and the detail under the number in the blotter which goes with that particular ledger.

Q. Do you have a blotter or day book which is journalized into the ledger? That is, is there another book prior to this journal on the operating ledger that has entries more in detail?

A. In respect to what?

697 Q. Right on this question of coke?

A. Our record contains full information on the subject of our coke transactions of every kind, and if you will indicate just specifically the information you would like to have I will undertake to furnish it.

Q. What I am trying to find out is: What you really get for your coke per unit, whatever it is?

A. The number of prices that I read off, varying from 75 cents for screenings to $3.00 for coke retailed.

The MASTER: As I understand it, what he wants to get at is: Is there any book of original entry which contains those prices, with respect to each transaction as it takes place? In other words, can he get at that by looking at any particular day book or journal or blotter instead of looking at loose memoranda from which those entries were made into the journal or the operating ledger.

The WITNESS: Yes.

Mr. MATHEWSON: Take one particular item; let him illustrate. Will not that be more specific?

The WITNESS: I think we might do it in this way. Of course the sale of coke would be indicated in the 14th Street station coke account, in the items shown on page 185 of the operating ledger, and in the item of sundry debtors, $11,118.63; that is found on page 17 of the journal of the operating ledger.

The journal of the operating ledger is marked Complainant's Exhibit 98 for Identification.

The WITNESS: There appears sundry debtors, Coke account, 14th Street station, $11,118.63. The records of the transaction of which

that amount forms the aggregate would appear in the sundry
698 debtor blotter for the month of January, 1905, and that is here and I would be glad to pick out those items aggregating $11,118.63.

Q. Very well.

(Book produced by the witness is the blotter of the sundry debtors ledger and is marked Complainant's Exhibit 99 for Identification.)

The WITNESS: On page 662 of Exhibit 99 for Identification appears a copy of the bill rendered the National Coal & Coke Company for coke delivered at the 14th Street station, or at least some of the coke delivered at the 14th Street station during the month of January, 1905, that is to say 4,363.1215 loads of coke at $2.20 a load, making $9,600.38; 427 loads of screenings at 95 cents a load, making $405.65, a total of $10,006.03. On the same page in Exhibit No. 99 for Identification appears a charge against the Astoria Light, Heat & Power Company for coke delivered to that company from the 14th Street station, amounting to 234 loads, at $2.20 a load, $514.80. On page 652 of Exhibit 99 for Identification appears a charge against the Astoria Light, Heat & Power Company for coke delivered from the 14th Street station, 253 loads, at $2.20, $556.60. The total so far of the items I have called off is $11,077.43, and the item representing the difference $41.20 is some small bill which doesn't disclose itself immediately in the records of the bills rendered in the month of January, which cover a great many pages in the blotter; but during the noon recess I will undertake to have it located and point it out this afternoon.

Recess until 2.15 P. M.

699 After Recess.

ROBERT A. CARTER resumed.

Cross-examination by Mr. PAGE continued:

The WITNESS: During the lunch hour I have located two items in the Sundry Debtor Blotter, marked for identification Complainant's Exhibit 99; that is to say, on page 652, an item of $22.70, and on page 662, an item of $18.50, aggregating $41.20, which together with $11,077.43, the total arrived at in the morning session, makes the total amount shown in the Sundry Debtor Blotter, as the sales of coke at the 14th Street station during the month of January, 1905, $11,118.63, which agrees with the entry in the Sundry Debtor Journal and in the Operating Ledger as I have testified (fol. 185).

Q. The figures you just testified to are for labor and handling coke, and not for the coke itself?

A. The labor of handling these two particular sales of coke to the Astoria Light, Heat & Power Company.

Q. And therefore the amount, as far as the coke actually delivered is concerned, was correct as you have stated it before?

A. The charge for the coke to the Astoria Company included the labor of loading it for delivery to them.

By Mr. MATHEWSON:

Q. Are those the two small items to which you just testified?
A. Those are the two small items, yes, sir.
Q. I suppose what the Senator means is that that does not affect the amount in tonnage or loads of coke?
A. No, it does not.
Q. That is as you have testified?
A. Exactly, as to the price and the quantity.

700 By Mr. PAGE:

Q. Now, have you the account of the National Coke & Coal Company?
A. The account of the National Coke & Coal Company appears on page 124 of the Sundry Debtor Ledger, marked 100 for identification.

The Sundry Debtor Ledger is now marked Complainant's Exhibit for identification No. 100.

Q. According to that account, what was the total amount of coke sold to the National Coke & Coal Company, expressed in dollars, for the year 1905?
A. It would take a little time to pick out the items as shown by the ledger account of the National Coke & Coal Company. If you care to wait until morning I can have that done, and save the time of doing it here.
Q. Yes, we will pass that item for the moment then. Does the National Coke & Coal Company handle coke for any other concern than the Consolidated Gas Company?
A. No, sir.
Q. It does not handle coke for the Central Union Gas Company?
A. No, sir.
Q. So that the operations of the National Coke & Coal Company will show the sales of the coke of the Consolidated Gas Company which is charged as against them on this ledger?
A. Yes, sir.
Q. And would not be complicated by the sales of coke for any other concern?
A. For no other concern, no, sir. It would not comprise all the sales of the Consolidated Company.
Q. No, that is why I changed my question. The ledger, Exhibit No. 100 for identification, is the one that has in it the account for street lamps, isn't it?
A. The account with the City of New York?
Q. Yes, for street lamps.
A. For street lamps, yes, sir. The account appears on folio 93 of the Sundry Debtors Ledger, which is marked Exhibit 100
701 for identification.
Q. Now, will you explain this account, what the charges mean?
A. The charges that appear in the account refer to the charges for the repairs to the street lamps.

Q. And that item alone?

A. And that item alone.

Q. And will you see how much that amounted to for the year 1905?

A. $162,787.76.

Q. Is that a part of the item of "expenses, street lamps, $289,-259.09" that appears on Complainant's Exhibit 94?

A. Yes, sir, the major part of it is. I observe that there are some charges included in here for naphtha and some for carting, furnished to the corporation of the City of New York.

Q. Well, that would be in connection with the repairs, wouldn't it?

A. I am not sure that that is the case. For example, naphtha, I don't know why we would charge the city with naphtha in connection with any work we did for them. I think more likely we have sold it to them for purposes of their own.

By Mr. MATHEWSON:

Q. It may be probably naphtha for thawing out the lamps in the winter time or something like that?

A. No, we would not charge them for naphtha used for that purpose.

By Mr. PAGE:

Q. Well, if there is any item in that account which should be deducted, will you indicate what it is and how much deduction?

A. Senator, after comparing these items with the sundry debtor blotter, I am of the opinion that every item here is properly a credit and applies to the street lamp account as shown in the operating ledger. I note, however, that after July——

702 Q. Do you mean properly a credit?

A. Yes, being a charge against the city and a credit to the operating account.

Q. But in this account it appears as a debit?

A. All charges appear in this account, of course, as debits. Every item here is properly a credit against the operating account, street lamps, and the aggregate for the year 1905, as already testified, is $162,787.76.

Q. Prior to July you seem to have an entry in each month of about $21,000, running from $20,743 in January to $21,757 in July, and after that period that item seems to be omitted from the account. Will you explain what that item was?

A. I think that it may reflect some change in the contract at that time or the fact that the price of gas to the city changed at that time, or at least the price of gas fixed by law to the city was changed at that time; what change we might have made in this account I am not able to say at the moment. If they were not charged here they were charged elsewhere for whatever service was rendered.

By Mr. MATHEWSON:

Q. The law reducing or purporting to reduce the price of gas from 90 cents to 75 cents to the municipality took effect July 1, 1905,

Mr. Carter, and is that act which we are now contesting in this suit. Would that give any explanation, to your mind?

A. It may have had something to do with it.

By Mr. PAGE:

Q. What effect would the reducing of the price of gas have on repairs to street lamps. As I understand, this account was an account of repairs to street lamps?

A. That is my understanding. I know it is so at the present time.

703 Q. Well, is it that up to July, 1905, you had a contract for repairs and maintenance and after that time the Welsbach Lighting Company had it, or anything of that sort?

A. That might possibly have contributed. I would like to look at my ledger and give you the information later.

Q. What other accounts would enter into this $289,259.09 of street lamps on Complainant's Exhibit 94?

A. The charges against that account are made up from the pay rolls, from the reports of the employment of material in repairing or maintaining street lamps, any bills paid the Wellbach Street Lighting Company for maintaining mantle burners and charges of that kind, would appear to the debit of the street lamp account, the operating account to which you are referring.

Q. Is that brought into any ledger account, any single ledger account, those items that you speak of?

A. Yes, they are brought into the street lamp account that you were consulting yesterday in the operating ledger. The street lamp account for the Hester Street branch is shown on pages 601 to 607 of the operating ledger, marked Complainant's Exhibit 97 for identification.

Q. Now, where is that assembled and made a charge against the City of New York, in what account in your books?

A. Some of the charge against the City of New York, which would reimburse the company for expenditures that appear in this account, would appear in the sundry consumers ledger, where the city appears as a debtor for supply of gas to, and lighting and maintaining public lamps.

Q. Now, before we turn to that account, will you take your blotter of the sundry debtors account, and refer to one of those items of $21,000 and see just what it is?

A. The item in January, $20,743.33, the memorandum in
704 the sundry debtor blotter marked Exhibit 99 for identification is a charge against the corporation of the City of New York, for lighting, extinguishing and maintaining public lamps for the month of January, 1905, at Hester Street, 66th Street and 111th Street, $20,743.33.

Q. Well, now, knowing what that item is, was there any reason that you know of for its disappearance after the month of July in the accounts?

A. Yes, sir, a very good reason. The reason that it was not based on anything more than an estimate and did not represent an actual expenditure on the part of the company for that service. As you

will observe, the entry gives no detail or any particulars of any kind, and no information of that sort was then or is now available. Therefore the practice of arbitrarily making that division was abandoned.

By Mr [illegible]THEWSON:

Q. Do you get a lump sum for the gas and lighting and extinguishing, &c.?

A. Yes, sir, we do.

Q. Without any division at all?

A. Without any division of any kind.

By Mr. PAGE:

Q. And because this was merely a method of estimation and did not represent any financial transaction, you abandoned it afterwards, is that your statement?

A. Abandoned this particular method, and charged the city as a sundry consumer, as the books will indicate thereafter, for the full amount of their bill, not only the gas, but the maintenance, lighting, extinguishing and maintaining.

Q. Then the account up to July 31st, represents not alone repairs to street lamps, but also for lighting, extinguishing and maintaining?

A. At an estimated figure, yes, sir.

Q. At an estimated figure. To light and extinguish and
705 maintain public street lamps, you had to employ men, didn't you?

A. Most decidedly.

Q. And their wages would be the cost, that much of it would represent an actual transaction wouldn't it, of which the value could be fixed and not estimated?

A. Yes, assuming the men were engaged exclusively in that line of work.

Q. Now after that time you say you adopted some other method of charging them. What is that?

A. The city appeared as a debtor in another account for the entire amount of the bill for the street lamp service including the gas and the maintenance.

Q. Will you turn to that account please?

A. The account would appear in the consumers ledger which I have not among the books that are here.

Q. You mean the consumers' ledgers at the different branches, or——

A. No, at the general office.

Q. Were you not to prepare us a statement of that amount?

A. Yes, that is being prepared today? I will have it in the morning.

Q. And that is the account to which you refer?

A. That is the account, yes, sir.

Q. Have you the ledger here in which appear the details of your transactions with the Welsbach Street Lighting Company of America for their care or service with reference to these street lamps?

A. We have not that ledger here. They appear as creditors of

the company instead of debtors, and their account would appear in a sundry creditors ledger.

Q. What account would the credit be in when you debit them what you pay, where would the credit appear to offset the debit?

A. What are you referring to?

Q. Well, as I understand double entry bookkeeping, you must in some way get rid of that credit balance by entering a debit balance and to do that there has to be another credit to offset it.

A. To what account are you referring?

706 Q. The Welsbach Street Lighting Company account?

A. The Welsbach Street Lighting Company account would be credited with the amount of their bill for maintenance of the public lamps equipped with mantle burners and the street lamp account would be charged with that bill.

Q. You have the street lamp account here haven't you?

A. Yes, sir.

Q. So that that would appear as a part of the street lamp account segregated for these different stations that you have referred to in the operating ledger?

A. Yes, sir.

Q. And the total of that account would include that item as well as the other items of charge against the city, would it?

A. The street lamp account?

Q. Yes.

A. Yes, sir.

Q. This item which you have been testifying to on your sundry debtors ledger, corporation of the City of New York, is not included in any way, is it, in this $289,259.09, headed Street Lamps, on this exhibit?

A. No, those are the maintenance and the repairs which have been charged against the city and have been credited to that account.

Q. Credited to which account?

A. The street lamp account.

Q. And does that appear in the 160 odd thousand dollars?

A. No, not all as a credit to street lamp account. The repairs appear as a credit to street lamp account. I might be able to point that out.

Q. This sum of $289,259.09 set forth under the head of street lamps in Exhibit 94 is the total of your street lamp account for the Hester Street Department, Sixty-sixth Street Department and 111th Street Department?

A. Yes.

Q. Will you show on that account where there are any offsetting credits?

A. The offsetting credits in that account are the bills rendered the city for repairing the lamp posts.

707 Q. Well, this item of $289,259.09 represents, then, the entire debit side of the account?

A. The entire debit side, account for maintenance and repairs, less the amount billed the city for repairs.

Q. Show me where is the offsetting credit that reduces this amount to $289,259.09.

A. Well, this is a long account. I will have it all taken off and summarized if you desire. It is a pretty long account.

Q. Have you got it here?

A. I think it is all here. I can take up one and illustrate it.

Q. Let me look at it.

A. Here is an item for example, an offsetting charge to sundry debtors and crediting this account.

Q. Referring to a credit of the Hester street account?

A. That item represents charges made during the given month to the city and to any other parties for whom work was done in connection with the street lamps either in the nature of erecting or removing or resetting or repairing the lamp posts. It would be spread out perhaps in a number of items in the sundry debtor blotter for the month, and if you care to have me, I will summarize them.

Q. Is there a street lamp account in the general ledger in which all of these items are assembled relating to street lighting and lamps?

A. No, the general ledger account is a single operating expense account which brings all these operating accounts together in one single account.

Q. Now, when you have referred to this debit balance of $289,259.00, where do you charge that off?

A. To profit and loss account at the end of the year.

Q. As a debit item?

A. As a debit item, closing it into profit and loss account.

Q. Could you give us a detailed analysis of your profit and loss account?

A. I could.

Q. For the year 1905?

708 A. Yes; you have got it already, I think, comprised in the exhibits; that statement showing the gross revenue, the operating expenses, the net revenue, the miscellaneous income, income from owned securities, dividends and the deficit. With respect to the sales, they appear as one item in the operating ledger.

Perhaps this would be a good time to explain the slight difference of some thirteen hundred or fourteen hundred dollars that appeared in comparing this statement of sales with the operating ledger last evening.

By Mr. MATHEWSON:

Q. What statement of sales?

A. The statement of sales appearing in Exhibit 96.

By the MASTER:

Q. That difference about which the question was raised yesterday?

A. Yes, a statement of the gas sales for the calendar year 1905, on page 719 of the operating ledger, marked for identification Complainant's Exhibit 97; the gas sales are given as $13,553,802.97, that being the amount of bills rendered to consumers for gas supplied during the year.

By Mr. MATHEWSON:

Q. According to their meters, I suppose?

A. As shown by the meter reading, including also, however, the gas supplied for public lamps, which is not metered. On page 707 of the operating ledger referred to appears an account called Special Deductions which is charged with special allowances to consumers upon their bills, aggregating for the year $1,320.00. In making a statement of the sales for the year, as those deductions were made from the consumers' bills, the sales in the statement Exhibit
709 No. 96 were shown for the net amount; that is, for $13,553,-802.97, less special deductions of $1,320.00, leaving the net sales as shown in Exhibit No. 96, $13,552,482.97.

Q. In other words, Exhibit No. 96 was a statement of income at that point?

A. A statement of gross income from sales of gas.

Q. And having made the allowances in question, it would not have been accurate had it shown the amount without those deductions?

A. No.

By Mr. GANS:

Q. Those deductions, do I understand it, are cases where people had established to your satisfaction that they had been overcharged and you made them an allowance?

By Mr. MATHEWSON:

Q. Not in the character of rebates in the ordinary sense?

A. Not in the character of rebates or donations.

By Mr. PAGE:

Q. When we referred to the details of the profit and loss account, you said you thought it had been given in Exhibit 96?

A. Substantially, yes.

Q. That is the exhibit to which you refer?

A. That is the exhibit to which I refer, and I was about to explain that while the operating expenses are given here in one item, they are given in Exhibit 94 in considerable detail. A statement is being prepared giving the gross fixed charges, the credit interest, and confirming the net amount charged for the year, $972,423.44. The income from securities owned, miscellaneous income and dividends paid are shown in this report, and appear to debit and credit on profit and loss account; and in fact, there is nothing in
710 this profit and loss account that does not show in this statement, according to my understanding. If you wish, however, I will check the statement and confirm that.

Q. You could show that by your final trial balance for the year? That shows a deficit, does it not?

A. The trial balance would scarcely indicate it. A comparison of the balance in the profit and loss account on the 1st of January, 1905, and the 31st of December, 1905, would show that. I will make such a comparison if you desire.

Q. Could you let us look at the final trial balance in which this deficit appears. After charging off the various items, I mean, to profit and loss, you take a final trial balance.

A. The trial balance would not indicate any deficit whatever.

Q. There is a suggestion to me that it would show in some way how the deficit fits in and is taken care of. Would it not?

A. No, it would not in any way whatever. It would simply show the balance in the profit and loss account at the date the balance sheet was made up.

Q. If you have a deficit that goes to reduce your profit and loss, and you have to draw from surplus, will there not be some entry or item on your trial balance that should correspond to that deficit? This is supposed to be a result of your year's business When you get through that, you find you have a deficit, which you had to make up from surplus. Where is your trial balance to show that deficit after that deduction is made?

A. The balance sheet as of December 31st, 1905, would show the surplus account after that deduction.

Q. That is what I want.

A. The amount of surplus on December 31st, 1905, was $920,476.64, as shown by profit and loss account on page 721 of the operating ledger, Complainant's Exhibit 97 for Identification.

711 By Mr. GANS:

Q. If we had the corresponding trial balance at the end of the year 1904 and compared the surpluses appearing thereon with the surplus appearing on your trial balance at the end of 1905, less dividends, &c., we would then be able to get at this figure of deficit which appears on Exhibit 96, would we not?

A. I would only make this statement in that connection; the trial balance or balance sheet could only be a copy of the books. We have brought the books here to confirm the balance sheets. Now, the account itself is before you, and the variation between the balance on the first of January and the 31st of December, 1905, is right here in this account. It does not take a balance sheet for two periods to show the variation in the profit and loss account when the profit and loss account is before you.

Q. It would show it, would it not?

A. Certainly such a balance sheet would show it the same as this ledger does.

Q. It would assist in proving the books, would it not, according to a bookkeeper's or an accountant's ideas of proving a book—that is, establishing the propriety and accuracy of the system of bookkeeping?

A. No, nothing of the kind.

Q. Would you give that as your opinion as a man used to handling books for many years?

A. No, not when the books are before you. The balance sheet would be of very little use when the books are before you.

Q. If you had a balance sheet, would it facilitate you in knowing what to look for in the books?

A. It would facilitate you to the same extent that the index in the front of the book I am now using would give you the folios of the accounts in the books; it would not even facilitate it as much as that, because the accounts in the balance sheet as they
712 have been exhibited here are not folioed; therefore it would not be as useful as the index in the ledger would be.

Q. Have you a book of trial balances?

A. We have a book of the trial balances.

Q. Have you that in your possession?

A. I have that in my possession.

Q. And it is a book which would contain the balance sheet that I refer to?

A. It would contain the balance sheets taken from the general ledger every month in the year.

Q. Is there a final balance sheet in addition to those made up at the end of the year?

A. There is a final trial balance sheet; a balance sheet as compared with the trial balances that are taken off monthly during the year.

Q. Is there a final trial balance sheet too?

A. There is a final balance sheet as of December 31st, and a balance sheet of December 31st.

Q. Each year?

A. Every year.

Q. Are those contained in separate books, or does one book cover a number of years?

A. I think they are contained in one book; or rather I think one book would cover two or three years. In some cases I think one book would contain one year's balance sheets.

Q. Is that such a book as this, a bound book, the same shape or form?

A. Not as large as anything here.

Q. But it is a bound book?

A. Yes, sir, a bound book.

Q. Not a loose leaf system?

A. No, sir.

By Mr. PAGE:

Q. Would that book contain the final balance sheet after the entries had been made to profit and loss at the end of the year?

A. Yes, it would give the balances that appear in this account before you.

713 By Mr. GANS:

Q. Have you no account called surplus account?

A. No, sir, we have not a surplus account.

Q. The only account in which surplus appears is the profit and loss account?

A. The profit and loss account.

Mr. PAGE: We make application for the production of the final balance sheets of 1903, 1904 and 1905.

Mr. BURR: The same application is made on behalf of the City as well as the State.

Here an informal discussion between counsel took place which the stenographer was directed not to take.

Mr. MATHEWSON: We object to the 1903 balance sheet on the grounds that I have stated. We put in two statements of operation, for two years; one beginning October 31, 1904, and terminating October 31, 1905, and the second one beginning December 31st, 1904, and terminating December 31st, 1905. I have no objection to producing the balance sheets for those periods, or allowing an inspection to confirm them at the company's office; but back of that for the reasons I have stated I do not think it is proper that we should be asked to do it.

Mr. PAGE: I call the Master's attention to the fact that the complainant has put in a condensed balance sheet, going back to 1884, for the purpose of comparison with October 31st, 1905, for the purpose of his case. Now, it seems to me that we are not going into any examination of the books or anything of that sort for those years; but it has quite a bearing on this question of their alleged surplus.

The MASTER: It seems to me that is so, Mr. Mathewson.
714 As I recollect it, you put in some tabulation that went back for quite a period of years. Now, while of course the extent to which the details of that can be gone into is, I fancy, a matter of discretion, and ought not be allowed to extend to unreasonable allowances; still I think for the purposes of ordinary cross-examination these gentlemen are entitled, for the purpose of testing the accuracy of any statements that they may question, to get those documents.

Mr. MATHEWSON: The statement just referred to, the balance sheet, was of this character: the allegation of the bill was that the company was incorporated with a certain capital and took over property which was appraised at a certain figure. Then the allegation of the bill continues that the stock had been increased, and that the property meanwhile had increased to certain figures on the books of the company. This question which was presented here was merely to meet the requirements of the allegation, to show how the company stood in its stock and its assets, in this balance sheet in 1884, as increased to 1905. Merely to show the comparison of the two—not a comparison of the two so much as to meet the allegation of the bill, that the books of 1905 show certain things. If the Master thinks that the 1903 balance sheets would be instructive to December 31 as requested, in connection with those of 1904 and 1905, very well, but I do not see how it is material.

The MASTER: I do not know what these gentlemen have in their minds; still I can conceive that it may have some relevancy or materiality in regard to this issue raised by your bill, and I
715 should be disposed to let them go into it, at all events for the purpose of developing what points they have got. As I understand it, you ask for the balance sheets of 1903, the end of 1903 and 1904.

Mr. PAGE: And 1905.

Mr. MATHEWSON: If the Master's ruling is that they be pertinent, we will except and produce them of course.

The MASTER: As I understand it, all these gentlemen want is an inspection; possibly after inspection they may find that they do not care to use it.

Mr. PAGE: That is all; we simply desire to use it, possibly to limit our cross-examination.

Mr. MATHEWSON: Has the Master ruled on the request?

The MASTER: Yes.

Mr. MATHEWSON: Then I except, and we will of course observe the requirement of the Master.

The WITNESS: That is to be presented here in the same way as these balance sheets are, as I understand it.

The MASTER: Let us have an understanding on that. There has been some informal discussion here to-day about the advisability of counsel attending with their experts at the office of the company instead of having this very slow and cumbersome method of proceeding here with the books, and if that suggestion is carried out I assume that an inspection of those balance sheets at the office is all that you want, Senator. You do not care about having those books brought down here, if you can get what you want up there.

Mr. PAGE: No.

Mr. MATHEWSON: We can produce a copy of them if it is required.

716 Mr. BURR: From the conversation I had with Mr. Page I was under the impression that Mr. Mathewson, counsel for the complainant, had agreed that the City's expert accountant, as well as the accountant for the State, might attend at the office of the complainant company and there make such an inspection as was agreed upon. This inspection I now understand is agreed upon to the extent of an examination of these balance sheets which the Senator has just described. Am I correct in that understanding?

Mr. GANS: It goes beyond that.

Mr. MATHEWSON: Well, so far as Mr. Burr has stated it, that is quite agreeable to us.

Mr. BURR: And so far as these accountants might observe anything else that might enlighten them as to the items in these balance sheets, that information would be extended to them and shown them by Mr. Carter.

Mr. MATHEWSON: Now you are going pretty far. I don't know quite what you mean. If they wanted a special examination on any question it might be we would prefer to have it before the Master. I cannot conceive that you will, but I wouldn't want to stipulate on the point that you raise at present.

Mr. BURR: No, I assume if they find there is any information which in their *po*inion they require and should Mr. Carter refuse to give us that, we may make such representation about it to the Master as we deem proper and have him rule upon the matter.

Mr. PAGE: Well, we can do that any way.

Mr. MATHEWSON: They are to have the inspection of the balance sheets requested, to see what they are, and even if the Master con-

siders it pertinent we will allow a copy to be taken and an
717 examination, and if any questions arise they can be dealt with.

Mr. BURR: Very good.

Mr. GANS: Are they not also to have an inspection of the books of accounts for the calendar year of 1905?

Mr. MATHEWSON: Farther than that, the complainant is willing, instead of compelling counsel to check off this statement, Exhibit 94, to see whether the aggregation of items in that exhibit is an actual aggregation of those in the books of the company, to permit the accountants of the City and State, one from each, with Mr. Carter, to go over the items of the books of the company of which these various headings are the aggregate to see whether they are an accurate aggregate of those items, and whether the summary in Exhibit 94 is a true statement of the items as they appear upon the books of the company.

Mr. PAGE: And also Exhibits 95 and 96.

Mr. MATHEWSON: And also Exhibits 95 and 96.

Mr. BURR: Now, when is this examination to take place?

Mr. MATHEWSON: 8 o'clock to-morrow morning. We would be glad to have it go on then and proceed through to-morrow. Mr. Carter has consented to stay here so as to facilitate it, at the office of the company.

At 4 P. M. adjourned to Monday, August 13, 1906, at 11 A. M.

Last Exhibits:
Complainant's 100.
City's 1.
State's E.

718 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John A. Shields, Clerk of the Circuit Court of the United States of America, for the Southern District of New York, in the Second Circuit, do hereby Certify that the foregoing (Vol. 1), pages, numbered from one to 717 inclusive, contain a true and complete transcript of the record and proceedings had in said Court, in the cause entitled Consolidated Gas Company, Complainant, Appellee, against Julius M. Mayer, as Attorney General, *et al.*, Defendants-Appellants, as the same remain of record and on file in my office. (Vol. 1.)

In Testimony Whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, in the Second Circuit, this 15th day of May, in the year of our Lord One Thousand Nine Hundred and eight and of the Independence of the said United States the One Hundred and thirty-second.

[Seal of the U. S. Circuit Court, South. Dist. New York.]

JNO. A. SHIELDS, *Clerk.*

[Endorsed:] United States Circuit Court of Appeals for the Second Circuit. —— —— *vs.* —— ——. Transcript of Record from the Circuit Court of the United States for the Southern District of New York.

719 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, MONDAY, *August* 13, 1906—2 p. m.

Met pursuant to adjournment.
Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Burr, Mr. Page, Mr. Gans.

U. S. Circuit Court, Southern District N. Y. Filed Jun- 24, 1907. John A. Shields, Clerk.

720 ROBERT A. CARTER—Cross-examination by Mr. PAGE continued:

Q. Have you produced any of the statements heretofore requested?
A. I produce a statement which you requested in reference to the debenture bonds.

Mr. PAGE: I offer the statement in evidence.
Received in evidence and marked State's Exhibit F.

The WITNESS (continuing): I produce a statement showing the amount of gas stove rents received during the year 1905, amounting to $122,322.60 (above statement not offered in evidence). I have also had prepared a statement showing the quantity of gas supplied to the city during the calendar year of 1905. The quantity includes the gas supplied public lamps, which is estimated. The statement also shows the amounts charged against the city for gas sales, for the maintenance of public lamps, and for repairing city lamps.

Mr. PAGE: I offer the statement in evidence.
Received in evidence and marked State's Exhibit G.

Q. Where did you say this item of gas stove rents appears in the preceding exhibit?
A. It does not appear in any particular exhibit except as included in the item of miscellaneous income. We made a similar statement respecting the nominal year ending October 31, 1905.

By Mr. MATHEWSON:

Q. But that appears in Exhibit 95 and this appears in Exhibit 96?
A. Yes, in Exhibit 96.

Q. It does not appear, then, in both Exhibits 95 and 96?
721 A. No, that is right. I thought the Senator was referring to both statements of rent.

By Mr. PAGE:

Q. Referring to State's Exhibit G, as I understand the first item "Metered service" refers to the gas furnished to public buildings at a rate of 90 cents, is that right?

A. Yes, sir, and in that connection, Senator, I should explain that while we have charged the City at that rate since the first of July, 1905, no bills have been rendered to the City. The price of gas supplied to the City was fixed at 75 cents by the act of the legislature going into effect July 31, 1905. We are contesting that act of the legislature, and in the meanwhile we are withholding the bills, although for the purposes of making up our accounts, completing our accounts, we are putting the charge through the books at the rate of 90 cents per thousand cubic feet.

Q. Then 127,746,300 cubic feet of gas at 90 cents is the actual measured cost that was sold?

A. With the exception of 33,600 cubic feet which, while charged for at the rate of 90 cents, is not metered because it is gas supplied some experimental lamps, the maintenance of which is attended to by the parties who own them. We furnish the gas to the lamps and the charge in our books appears at the rate of 90 cents per thousand cubic feet.

Q. And that is billed or charged on your books at $114,971.70?

A. That is the case, yes, sir.

Q. And the item of 270,779,678 cubic feet, which is estimated, I notice is charged on the books at $565,241.39?

A. That is the case.

Q. The difference between that 270,779,678 cubic feet at 90 cent, and $565,241.39 would be the amount charged for lighting and maintenance, would it not?

A. That assumption would be correct if the quantity shown
722 there, 270,779,678 cubic feet were a metered quantity. It is an estimated quantity and estimated, we think, at a very low figure, being three cubic feet per lamp per hour. As a matter of fact, we have every reason to believe that the consumption is considerably more than that. If that is the case the amount furnished the city through public lamps calculated at 90 cents would amount to more money than the amount shown in that report, the difference between which and the total amount of the bill would be less than the figure you are assuming.

By Mr. GANS:

Q. Well, if the city maintained its own lamps and you charged them for nothing but the gas that you delivered and charged at the best basis at which you are able to justify under present conditions, you would receive 90 cents per thousand cubic feet on 398,525,978 cubic feet, wouldn't you?

A. Yes, we would, assuming that we made such a contract and

accepted three cubic feet per lamp per hour as a fair basis for computing the gas supplied.

Q. Well, that is the best computation you are able to make at present?

A. No, I am inclined to think that the present contract stipulates three and a half cubic feet under existing conditions, and assumes that quantity supplied to the lamps. That is my impression.

By Mr. PAGE:

Q. Is that the estimate you have made here?

A. No, that estimate made there is upon the basis of previous contracts where the quantity of three feet per hour was stipulated in the contract.

723 By Mr. GANS:

Q. But as of present, I mean the time covered by this statement?

A. It would not make any difference. The same quantity of gas is supplied to the lamps now as last year. We are satisfied it is nearer four feet than three feet.

Q. But you haven't any method of proving that definitely, have you?

A. No, we have not.

Q. Upon the basis of charging the city these figures, charging the city for the amount of gas that here appears, and upon the basis of the gas otherwise accounted for by your meters, the amount of gas unaccounted for is only three per cent. of the total output, is it not?

A. That is the case, approximately three per cent. However, I might say that considerable variation in this amount, one hundred per cent., would affect the general sales I think hardly one per cent.

By Mr. PAGE:

Q. For the purposes of your company and for your own bookkeeping you take this amount of 270,779,678 cubic feet as the amount of gas that you deliver to the city at its lamps?

A. An estimated amount.

Q. Yes, an estimated amount. And that is the amount that enters into your books as the amount that is delivered?

A. Well, it is not the basis of any charge to the city. It is only an estimate made for the purpose of accounting for our output of gas for statistical purposes rather than any other purpose. We have not billed the city for any gas in connection with the supplying of street lamps, or did not during the period covered by that statement.

The WITNESS (continuing): I have a statement showing the entire gas sales for the year 1905, quantity, and amount of bills
724 charged or rendered for same.

Mr. PAGE: I offer the statement in evidence.

Received in evidence and marked State's Exhibit H.

The WITNESS (continuing): I have also a statement showing a table of the interest on bonded debt account; that is, the debit and credit items appearing in that account for the year 1905.

By Mr. MATHEWSON:

Q. Did that produce the amount of net interest that we charge?
A. It produces the amount of net interest which appears as a charge in our statement of operations for the calendar year of 1905 (Exhibit 94), being $972,423.44.

Mr. PAGE: I offer the statement in evidence.

Received in evidence and marked State's Exhibit I.

Q. With reference to Exhibit I, the items of interest on debenture bonds refer to the outstanding debentures of 1888?
A. Yes.
Q. And the item of Interest on convertible Debentures refers to the debentures of 1904?
A. That is the case.
Q. Now, as to the items of Interest on Bills payable; what do they refer to?
A. We had some notes out that were canceled in 1905, upon which that amount of interest accrued, and they were canceled during that year.
Q. What was the amount of those notes?
A. My recollection is that they amounted to $900,000.
Q. To whom and for what purpose were they issued?

A. The notes were due to the National City Bank, and the
725 purpose for which the money was originally borrowed I do not recall, if I ever knew. They had been outstanding for some time.

Q. What rate of interest did they bear?
A. My recollection is that the interest we paid upon those notes was 3¼ per cent. I presume it was because the rate of interest was so low that there was no haste in canceling that obligation.
Q. Now, in what account would those notes appear in the books?
A. Bills payable. The balance sheet that your expert took off of December 31, 1903, will show that amount as outstanding in that account at that time; not outstanding as of December 31, 1905.

By Mr. GANS:

Q. Can you tell us more definitely when those notes were made?
A. I cannot tell when they were made; it was prior to December 31, 1903, and they were canceled in 1905.

By Mr. PAGE:

Q. Can you state when those notes were issued?
A. No, I cannot.

By Mr. GANS:

Q. Can you get the information from your books?
A. Certainly.
Q. Will you have it in the next session?
A. I will.

By Mr. PAGE:

Q. On the credit side there is "Interest on special Deposits;" where were those deposits made?

A. ..t the City Bank; at one period during the year we had a sum on deposit there which was termed "special deposit," upon which we received interest. Subsequently interest was allowed upon the total amount that we had on deposit in the bank; that is the reason for a division of it into two amounts.

726

Q. This, as I understand it, the credit side of this account, is income on interest from investments derived from proceeds of the sale of convertible debentures?

A. Not investments in the case that you refer to, or the two items that you refer to. Those items include interest received on cash balances and not on investments.

By Mr. GANS:

Q. Your distinction is, that you do not call an amount deposited in bank which bears interest an investment?

A. No; that is the case.

Q. At what rate do they bear interest?

A. I am unable to say at the moment; I do not know.

Q. Could you ascertain the amount of interest or the rate of interest that you received from those special deposits?

A. Yes; I know it varied at different times, and I will make up a statement to indicate what the variations were.

Q. The interest on bank balances is on deposits in other than the City Bank?

A. No, the same bank.

Q. That was afterwards consolidated do you mean?

A. Into a general balance.

Q. So that this is for a portion of the year?

A. Each is for a portion of the year.

Q. When you are looking up that matter of the notes and bills payable, could you find out for what purpose that money was borrowed?

A. I could make an effort to. It is not always very plainly indicated for what specific purpose a loan is negotiated. Presumably it was to restore the cash account to a reasonable balance when it had been depleted for one expenditure or another. I should almost be willing to testify without examination that the money was borrowed, some of it at any rate, for Astoria construction, possibly. However, if there is anything that will plainly indicate what it was, I should be very glad to get the information.

727 & 728

At 3.30 o'clock P. M. adjourned until to-morrow, Tuesday, August 14, 1906, at 1 o'clock P. M.

Last Exhibit-:

Complainant's 100.
State's I.
City's 1.

729 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, TUESDAY, *August 14th*, 1906—1 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Burr, Mr. Page, Mr. Gans.

730 ROBERT A. CARTER—Cross-examination by Mr. PAGE continued:

The WITNESS: I produce the following papers, which Senator Page has requested:

A statement showing an analysis of the coke account for the year 1905, giving the quantities transferred to water gas stations, used for distribution, sold to other parties, &c., and the variations between the value of the coke on hand at the beginning of the year and the end of the year, and showing the total value of that produced for sale during the year to have been $338,300.91, agreeing with the item included among residuals in the statement of operating expenses for 1905, marked Complainant's Exhibit 94.

Mr. PAGE: I offer it in evidence.

Received in evidence and marked State Exhibit J.

Q. Is there any account kept of the coke that is manufactured at the coal gas stations and used at coal gas stations, in quantities?

A. No, sir; you mean used at coal gas stations under the retorts, and is not accounted for produced for sale?

Q. Yes.

A. No account of it is kept, no, sir.

Q. Nor any record of the total amount of coke produced at the stations that would show it?

A. The report to the Engineer's Department probably would show the estimated gross production or quantity used under the retorts, and the balance produced for sale, merely as a matter of statistical information, and necessarily purely an estimate, since the quantity that is used under the retorts is not weighed, but is shoveled from the retort itself right under the retort as it is discharged; it would be purely an estimate.

731 Q. It would be possible, would it not, to have a statement made showing that item?

A. The estimated quantity used under the retorts?
Q. Yes.
A. It would be possible; I have no doubt that could be tabulated from the records in the engineering department.
Q. Will you have such a tabulation made?
A. Gladly.
In State Exhibit J appears an item sold to outside parties, coke and screenings, aggregating $290,232.48. The detail of those sales is given in another statement which I have had prepared showing the quantities sold at the various prices to the National Coke & Coal Company and to the Astoria Light, Heat & Power Company, who are the only two parties to whom coke was sold during the calendar year 1905. (Produces statement.)

Mr. PAGE: I offer it in evidence.
Received in evidence and marked State Exhibit K.

Q. Is there anything else?
A. I have had a statement prepared at your request showing the cost of repairs and renewals during the period from November 11th, 1884, to December 31, 1905.

By Mr. MATHEWSON:

Q. This is a sub-division by years of the statement already in evidence, is it not?
A. Yes, there is a statement in evidence giving the aggregate.
Q. For the whole period?
A. Yes, and this is a sub-division showing the expenditures each year.

Mr. MATHEWSON: Show it to Senator Page and see if that is what he wants. That is a detail of the gross statement.
Mr. PAGE: We offer it in evidence.
732 Received in evidence and marked State Exhibit L.

Q. State Exhibit L, which is now produced by you, is the detail of Complainant's Exhibit 79 segregated into years?
A. Yes.
Q. Will you explain the column headed "Production?"
A. The column headed "Production" shows the expenditures for repairs and renewals in connection with manufacturing gas, or the production of it.
Q. That is, the manufacturing plant, is it?
A. The manufacturing plant, yes.
Q. And the distribution?
A. In connection with the distributing plant and apparatus.
Q. That would be services, mains, and would it be holders also?
A. No, sir. The repairs and renewals of holders would be included in the "Production" repairs and renewals.
Q. Then the distribution repairs would be repairs to mains, services and gas stoves also?
A. Yes, and replacement of horses, wagons and harness, office furniture and fixtures, and scows, automobiles and property of that character.

The explanation that I wish to make is that the item of "Production" repairs of 1905, amounting to $217,319.07, is the aggregate of the three items of station repairs shown in the operating statement for the calendar year 1905, Exhibit 94; and the repairs included in the item of "Distributing station expense," which item is also included in the operating statement for the calendar year 1905. I will give the two figures. The aggregate of the three items of repairs shown in Exhibit 94 is $210,326.56; included in the item of distributing expense is cost of repairing apparatus, tools, buildings, etc., at the distributing stations and amounts to $6,992.71, making the total repairs in connection with manufacture
733 $217,319.07, as shown in State Exhibit L.

Q. What figure did you use as the divisor to obtain the cost per thousand sold?

A. The sales of the company's own make, in that case.

Q. In each instance?

A. No, pardon me; I thought you were referring to Exhibit No. 94.

Q. I mean on this Exhibit L?

A. On State Exhibit L the cost is calculated upon the entire sales.

By Mr. MATHEWSON:

Q. In every case?

A. In every case, in that exhibit, yes.

By Mr. PAGE:

Q. What year was it that you rebuilt practically the water-gas plant at Twenty-first Street, and—what was your other water-gas station?

A. I am not aware that we did that in any year.

Q. The time that you changed, taking out the gasogenes, and putting in your present system?

A. In the Twenty-first Street Station?

Q. Yes.

A. We substituted some Lowe apparatus for the apparatus that was then in use during the year 1904.

Mr. MATHEWSON: You remember that Mr. Bradley testified that the contents of the generator house were what was replaced, not the entire plant, nor anything like it. I suppose those are the gasogenes that you referred to.

Mr. PAGE: Yes, those being the two generators.

Q. Then, in 1904 you replaced the apparatus in the generator house at Twenty-first Street completely, did you?

A. No, not completely; some of it; some of the apparatus in use at that station was of the type that was installed in place of
734 some of the other apparatus, Lowe machines. We were operating Lowe machines at the Twenty-first Street Station for several years.

Q. And what did you put in place of them?

A. Nothing; I say that we did not replace all of the generating

apparatus at the Twenty-first Street Station with new apparatus in 1904.

Q. Is the other apparatus that is used there the same as was installed before consolidation?

A. That I am not able to say. My impression is that none of the generating apparatus at present at use at the Twenty-first Street Station was in there in 1884, but that is only an impression, and I am not by any means sure of it.

Q. By these changes that was made was the total output of gas at that station increased, or the capacity?

A. My impression is that the capacity at that station was somewhat increased by the installation of the new apparatus.

Q. The cost of that would be found in the item of renewals under the column of production, $266,688.22?

A. Yes. Pardon me; I should say that that would not be the cost of the new apparatus; that would be the value, or would include the value at which the dismantled apparatus was carried upon the books, which was charged off to renewal account, called depreciation account.

Q. I find in 1901 you had a renewal account under your heading of production of $275.114.94. Can you state what that was?

A. My impression is that it represented the cost of some holders at the 111th Street Station which were dismantled to make room for two large five million feet capacity holders that were installed at that point or were erected at that point.

Q. In 1898 it was $214,880.86. Can you state what that was?

735 A. I think in that case the charge was for holders dismantled at the Twenty-first street station to make room for new holders that were to be constructed at that point.

Q. In 1901 I notice it is $186,365.42?

A. My impression is that represents the cost of holders at the Eighteenth street station which were dismantled to make room for a large holder that was subsequently erected at that point.

Q. Now, generally, I will ask you—under the heading of distribution, to explain the item of Renewals; how that charge is arrived at?

A. The item of Distribution and Renewals, as it appears in Exhibit L, represents for each year the aggregate of the renewals charged for during that year from the various property accounts that have already been enumerated, including mains, services, meters, stoves, horses, wagons and harness, furniture and fixtures, automobiles, scows and property of that nature.

Q. Would that be the value of the property as carried on the books, or would it be the value of the new property that was substituted?

A. It would be the value of the property as carried on the books. In no case did we charge any new property to the renewal account.

Q. That is, if you took out a three-inch main and substituted a six-inch main you would charge off on your books the value of the three-inch main?

A. That is the case, yes, sir.

By Mr. MATHEWSON:

Q. And the additional cost of the six-inch main would go to construction of new property?

A. It would go to construction account. In fact, by the process of entering the transaction in the books the entire cost of the new main would appear in construction account, and the construction account would be reduced by the value of the old main as
736 carried in the account prior to the laying of the new main.

Q. And the net would represent what?

A. It would represent the addition to the book value of the property.

By Mr. PAGE:

Q. As I understand the bookkeeping account, you have a renewal account which would be debited with the old pipes?

A. That is the case.

Q. It would be a credit, as against the plant and property, of that amount?

A. Yes.

Q. And a debit to plant and property of the cost of the new mains?

A. That is the case, yes. The loss by reason of the removal of the old main would be diminished somewhat, as a matter of record, by the value of the old pipe as scrap.

Q. Have you anything else there?

A. This paper divides the State tax for the year 1905, amounting to $195,795.50, between the revenue from the gas business and the income from securities owned, in so far as it is calculated upon revenue, and between the excess of dividends over four per cent. paid upon capital stock which is invested in the gas business, and which is invested in the securities of other companies, in so far as it applies to dividends in excess of four per cent. paid during the year. The division, I might say, is identical with that which was made in the statement of expenses covering the years 1900 to 1904, made to the Senate Investigating Committee.

Mr. PAGE: I offer it in evidence.

Received in evidence and marked State Exhibit M.

Q. For the purpose of identification, the item of $195,795.50
737 appears on Exhibit M as the detail of item of State tax for the same amount appearing on Exhibit E; is that correct?

A. Yes.

Q. The division into tax on excess dividends, on amount invested in securities of other companies, and tax on excess dividends on capital stock actually employed in the gas making business refers to the two items of Complainant's Exhibit No. 80, being in accordance with the division of Exhibit 80, $41,356,409.86, capital stock invested in the gas business, and of the item $38,643,590.14, which is capital stock, balance?

A. Being capital stock invested in the securities of other companies.

Q. This division or segregation of this item was made by you to correspond with Exhibit No. 80, and was not made by the State officials.

A. That is the case.

Q. Is that all you have produced?

A. Yes.

The statement is made as of October 31st, because the nominal year covered by the report of the State Board on which the tax is estimated covers the period from November 1st to October 31st; in this case from November 1st, 1904, to October 31st, 1905.

Q. Referring to Complainant's Exhibit 94 the item "Contingent Expenses Including Renewals," that is the item which you have used for depreciation as I understand, to cover depreciation?

A. It covers depreciation.

Q. $1,328,316.27.

A. Yes, sir.

Q. Will you state the theory on which that account is opened in that way, what depreciation was it intended to cover and for what period of years was it estimated.

By Mr. MATHEWSON:

Q. What is that, Senator, I don't quite catch it, this account?

738 Senator PAGE: Contingent Expenses Including Renewals.
Mr. BURR: What year?
Senator PAGE: 1904.

The WITNESS: The account was opened upon the theory that a reserve of not less than that amount was necessary in our case to provide not only for current renewals and replacements and other unforeseen contingencies that might arise, but serious accidents, explosions, variations in the cost of materials and supplies, variations in the volume of business, and extraordinary replacements over and above replacement for wear and tear in the nature of supersession and is designed to cover that item in that report, more particularly the removal of the plant of the company, the manufacturing plant of the company to Astoria; and that instead of allowing such a fund to accumulate in the surplus or reserve account it should be separated and carried in a separate account plainly indicating its character.

Q. Did you make a sinking fund of the money thus segregated?

A. No, no sinking fund has been established of that nature.

Q. In arriving at this amount what period of years was taken into consideration as necessary to provide against the depreciation?

A. What period of years in our own experience?

Q. Well, in making up this amount that it was necessary to lay aside——

A. Well our own experience was that we required approximately four cents per thousand cubic feet sold for twenty years to take care of ordinary renewals and replacements, and that beyond that provision should be made to take care of such extraordinary re-
739 placement as might occur, particularly the replacement of the plant at Astoria; through the surplus account can be

considered a reserve account, or might have been considered at that time, but it was thought better that such other contingencies as might arise, more particularly variations in the cost of material and the volume of business and such serious accidents as might occur, and did occur in Boston, costing them I believe for a period of several years, 5 cents per thousand feet to provide for——

Q. Do you know of any other gas company that carries an account of this sort upon the theory that you use here?

A. Well, I don't have access to the accounts of many companies. Those that I have had all do it. I am told all the Boston companies do it and I am told other companies in this State pursue the same plan. I understand it is becoming a very universal practice.

Q. To carry an amount of ten cents per thousand cubic feet sold on the theory that that must cover the fluctuations in their business as well as the depreciation of the plant?

A. And the other contingencies that I have enumerated.

Mr. MATHEWSON: The Senator asked you if it was ten cents. It was ten cents as I understood him.

The WITNESS: In no case less than ten cents, and in some I understood, more; in fact we debated for some time whether we should not make it a larger sum than ten cents before it was finally decided upon, as shown in our accounts.

Q. You have a plant that you value yourself at some $15,000,000, haven't you?

A. About $15,000,000.

Mr. MATHEWSON: $16,087,000, October 31st; I think that is it.

740 The WITNESS: $16,087,428.72 October 31, 1905.

Q. Did you take that figure as the value of your plant and estimate what would be necessary to reproduce that plant and the length of time that probably should be allowed for its final depreciation?

A. Personally I did not do it, no, sir. I don't know that that particular calculation was made. You mean in connection with this particular reserve.?

Q. Yes, in arriving at this reserve.

A. No, I am not aware that that was done.

Q. Well, who made the calculations necessary for the establishment of this?

A. The amount does not represent the aggregate of separate units, so far as my knowledge of it goes.

Q. (Repeated.)

A. The question implies that it is an aggregate of some amount, the result of some calculations, but I am not aware that it is.

Q. Well, you could state definitely, could you, that it was not; that it was an arbitrary estimate?

A. I could not say covering anybody else's opinion upon the subject. My understanding of it is that it was a round sum arrived at after considerable debate as being adequate and no more than adequate for providing for the contingencies that have been enumerated.

By Mr. MATHEWSON:

Q. And the actual expenditure for replacement?

A. The actual expenditures which occur from time to time, which it is always intended it should include.

By Mr. PAGE:

Q. Then, as I understand you, this was a bookkeeping charge that would segregate that amount of surplus, and not a separate account really; there was no investment of a fund or separa-
741 tion of a fund other than that?

A. Well, I should say that it was not strictly a segregation of such account, as it never appeared in surplus account; it was thought better to create such a fund than to have it accumulate in a surplus account; it does not represent any segregation of assets in the nature of a specific fund.

Q. But this amount would appear in your operating expenses, to be journalized as such a charge against Profit and Loss, wouldn't it?

A. Yes, sir.

Q. And to that extent would be a depletion of your surplus in Profit and Loss Account, wouldn't it?

A. It would certainly operate to diminish the surplus earnings for the year.

Q. On Exhibit M the two items of $5,257.48, being the tax rate of one-half of one per cent., is the tax on income from securities from other sources than from the gas making business?

A. Yes, sir.

Q. And the other item of $70,538.02 is the tax on income from the gas business?

A. That is the case, yes, sir; and by using the factor one-half of one per cent. and the amount of the tax it is evident that the tax was calculated upon the gross amount of $14,107,604.00. There are no other sources than income on securities from other companies included in the item $5,257.48.

By Mr. GANS:

Q. How about interest on loans to other companies, Mr. Carter; isn't that included?

A. I don't think there is anything of that sort included there; interest on loans to other companies figures as a credit to offset the bond interest. The income is all itemized there, in the statement that I made, whatever it may be, it plainly states that it is income on securities.

Q. What I am trying to get at is this: Whether in assessing your tax the State Comptroller did not assess you on income de-
742 rived from the interest paid by other companies to you on loans to them as well as on the dividends paid to you?

A. No. My impression is they did not.

Q. There is some interest included here, I see in the statement itself. I did not notice that when I first asked the question.

A. It is made up from the tax statement itself, so it is bound to be

correct, and it is made up from the items from which the tax is calculated.

Q. Then, according to my understanding of the division as made by Exhibit M of the income derived from gas making business, and the income derived from other than the gas making business, and of the amount of capital invested in gas making, and the amount of capital invested in other than the gas making business, covers the amount of $5,275.48, and the amount of $57,965.39 was assessed upon items which were not involved in the gas making business, is that not so?

A. Yes, I think that is a fair statement.

Q. Making an aggregate of $63,222.87 out of a total of $195,795.50 of the item of State taxes?

A. That was the case, yes, sir.

Q. And have you figured how much that amounted to of your output in the year 1905?

A. Yes, I have made the calculation at Mr. Mathewson's request and it amounts to 47-100ths of one cent per thousand cubic feet sold during that year.

By Mr. PAGE:

Q. Referring to State's Exhibit H, Sales to Private Consumers, 12,884,637,789 cubic feet, the amount of the sales carried out in dollars is less than at the rate of $1 a thousand cubic feet, is it not?

A. Yes, $11,000 less than it would be calculated at $1 per thousand cubic feet.

743 Q. What is the explanation of that?

A. The explanation is that those sales include the prepayment meter sales, aggregating about a thousand million cubic feet of gas per annum, the sales through prepayment meters are reported as recorded. The collections are reported net, that is minus any bad coin that may be found in the meters and less any loss due to the burglarizing of meters, through the use of false keys, and to defective mechanism in some cases; this loss aggregates about one per cent. of the entire volume of sales. In this case it indicates about one and one-tenth per cent. due to these causes.

Q. Now, referring to Complainant's Exhibit 93, which was a summary of operations for the nominal year ending October 31, 1905, was Exhibit 145 of the hearing before the State Gas Commission a detail of that same period and made from the same books?

A. I believe it was, yes, sir.

Mr. MATHEWSON: Look at it and see. Haven't you a copy of it here?

The WITNESS: No, I haven't a copy of Exhibit 145 before the Gas Commission, but I remember that such a statement was made giving the operating expenses for the nominal year ending October 31, 1905, in some greater detail than given in Complainant's Exhibit 93 in this hearing.

By Mr. MATHEWSON:

Q. That was after they had been given in much less detail than in Complainant's Exhibit 93 and a request was made for the information in Exhibt 145 before the Gas Commission, wasn't it?

A. That was the case.

744 By Mr. PAGE:

Q. Have you records of the character of Exhibit 145 before the Gas Commission which would cover the calendar year of 1905?

A. No, sir, nothing of that sort has been made up for the calendar year 1905.

Q. Of course, you have the detail on the books of the company or in reports made to you from the different operation stations?

A. Yes, sir.

Q. So that such an exhibit could be prepared?

A. Yes, sir.

By Mr. GANS:

Q. You get practically those details, do you not, for each month from each one of the stations in a separate report?

A. Oh, yes, all spread out, every item, month by month.

Q. Do you not also get from the stations a yearly report to supplement the monthly report?

A. No, we do not.

Q. So to make up a report of this character you would have to have aggregated the figures of the monthly report from each station?

A. That is the case.

By Mr. PAGE:

Q. Well, you remember that you prepared Exhibit 145 which was put in evidence before the Gas Commission?

A. I remember it very well, yes, sir.

Q. And that was an accurate statement of the operations for the nominal year ending October 31, 1905?

A. That is the case, yes, sir.

Q. As appears from your books and records, I might say?

A. Yes, sir.

Senator PAGE: I will have this marked for identification.

Marked State's Exhibit N[illegible] identification.

745 Q. Does Mr. Bradl[illegible] make an annual report to the Directors of the Company?

A. I think not. I think he may make a report to the Chief Executive of the Company. I have not seen anything of the kind for a year or two. I remember two or three years ago seeing such a statement or report.

Q. Does he make that report in writing?

A. Yes, in writing. I say he does for I have seen such a report two or three years ago, but I have not seen one lately.

Q. Is that report kept by you on file?

A. The report that was made two or three years ago?
Q. Yes.
A. No, I haven't it.
Q. Is there anyone else that would have that report, if you know?
A. Assuming it has been preserved the vice-president I presume now might have it.

By Mr. MATHEWSON:

Q. You mean Mr. Addicks?
A. Yes.

By Mr. PAGE:

Q. How long ago was the last report made by him?
A. I have no idea when the last report was made. I am just replying to what I have information of, and that was the last report that I saw.
Q. Was that report communicated to the Directors of the company at any meeting?
A. You mean read to them or——
Q. Yes.
A. I think not.
Q. Were you present at any meeting of the directors when Mr. Bradley made any statement, or when there was any discussion in which he took part relative to the removal of the plant from New York to Astoria?
A. No, sir.
Q. Or when any report of Mr. Bradley's favorable to the removal of the plant to Astoria was being discussed, whether he was present or not?
A. No, sir.
746 Q. Have you ever had any discussion with Mr. Bradley in reference to it?
A. I think very likely that I may have conversed with Mr. Bradley on the subject. I would be very sure to, in fact.
Q. Has Mr. Bradley ever presented any report to any officers of the company which has become a matter of record or which is now either in your possession or in the possession of any other officer of the company, with respect to the operations of the plant at Astoria, either saying it would be more economical or more expensive?
A. I have no knowledge of any such report, Senator.
Q. Is there any record of any resolution at a meeting of either the directors or stockholders of the company with respect to the establishment of this plant at Astoria?
A. I don't know, Senator, whether there is or not.
Q. You have the custody of the Minute Book, have you, as secretary?
A. Oh, yes, I have custody of the Minute Book but I never had time to read over the old minutes in the books before I was the secretary of the company. I don't know what they might contain with respect to the organization of the Astoria Light, Heat & Power Company, and outside of that I don't know that there would be anything that would appear there. I don't think that those things would be

a matter of record on the minutes of the Consolidated Company, with respect to the acquiring of land or acquiring of plant. I have no recollection of anything of the sort appearing upon the Minute Book of the Board of Trustees and I know that nothing of that nature has appeared there for the last three or four years.

Q. Since you have been secretary?

A. No, nothing appears in the Minute Book of the Board of Trustees of that sort since.

747 Q. Could we trouble you to look back and see whether there is any such record?

A. Yes.

Q. And whether that refers to or is based upon any report of Mr. Bradley?

A. I will do so.

Q. At the same time that Exhibit 145 was put in evidence before the Gas Commission, which is marked Exhibit N for Identification here, there was prepared a statement showing the operations of all stations by months, was there not, being Exhibit 144 before the Gas Commission?

A. Yes, sir.

Q. And that was prepared by you?

A. Yes, sir.

Q. From the books of the company, and from the same books from which Exhibit No. 93 was prepared?

A. Yes, sir.

Q. Defendant's Exhibit 144 appeared in the printed volume of the proceedings before the Gas Commission at page 2082A?

A. Yes, sir.

Q. Were you familiar with the Knickerbocker Gas Light Company prior to the consolidation?

A. No, sir.

Q. Do you know whether that was operating as a separate company or whether that was controlled and operated by the Municipal Gas Light Company?

A. I don't know, only from hearsay.

Mr. PAGE: Now, with the exception, Mr. Mathewson, of examining Mr. Carter upon the accounts that are being prepared and tabulated by our accounts, and possibly upon the matter of the record that I have sent for, that would complete my cross-examination.

The MASTER: Are you ready to proceed, Mr. Burr?

Mr. BURR: I am ready to proceed with the cross-examination of Mr. Carter now, but I think that an adjournment till to-morrow morning would enable that cross-examination to be shortened,

748 after I have seen exactly what has been brought out by Senator Page, as I understood that Senator Page was to consume the balance of the day in his cross-examination, the cross-examination of Mr. Carter by Senator Page having extended now over the past week or eight days, but if counsel thinks that time is to be gained by it I will proceed now.

At 3.40 P. M. an adjournment is taken till to-morrow, August 15, 1906, at 1.30 P. M.

749 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, WEDNESDAY, *August* 15, 1906—
1:30 o'clock p. m.

Met pursuant to adjournment.
Present: The Master, Mr. Garver, Mr. Mathewson, Mr. Burr, Mr. Page, Mr. Gans.

750 ROBERT A. CARTER resumes the stand.

Cross-examination by Mr. BURR:

Q. Mr. Carter, did you prepare the statement for counsel upon which the complaint was based in this action?

Mr. MATHEWSON: What statement, Mr. Burr; there are so many statements in our complaint.

Mr. BURR: The statement of the financial condition of the Consolidated Gas Company.

Q. And purporting to show the necessity of a dollar charge instead of the 80 cents fixed by the statute?

A. If you will refer to some particular statement, Mr. Burr, I would be glad to say whether I prepared it or not; there may have been a number of them, and some of them I may not have prepared.

Q. Well, I presume there were no statements prepared for the information of counsel which were not submitted to you for your supervision or approval?

A. Oh, I would not like to reply to any general question of that kind.

Q. Did you prepare the statements which were submitted on behalf of the Consolidated Gas Company to the Stevens Investigating Committee?

A. Too general, Mr. Burr, I cannot answer that question negatively or affirmatively, for I don't know. There may have been statements that I did not prepare. I did prepare a great many.

Q. Did you prepare the statements that were presented on behalf of the Consolidated Gas Company to the Gas Commission?

A. To what statement do you refer, Mr. Burr?

Q. As to the finances of the company.

Mr. MATHEWSON: I suggest that counsel call the attention
751 of the witness to the statements to which he refers, because they were multitudinous, hundreds of them.

The WITNESS: Too general.

Mr. BURR: The witness I understand says it is too general?
Mr. MATHEWSON: The question is too general.

The WITNESS: The question is too general, it may refer to any statement, I don't want to say I prepared every statement submitted to the Gas Commission, because I don't think I did. I think there were statements prepared by the Engineering Department, which I never even saw.

Q. Was any person other than yourself engaged in preparing statements for the Stevens Committee on behalf of the Consolidated Gas Company?

A. My impression is there were statements prepared by the Engineering Department—any number of prepared statements called for by counsel for the Commission——

Q. Before the Stevens Investigating Committee?

A. I understood you to refer to the Gas Commission.

Q. To both?

A. The Gas Commission?

Q. To both.

A. Well, both.

Q. Did Mr. Whitely prepare statements for the committee and for the commission?

A. I am sure he did for the committee. My impression is he did also for the commission.

Q. Did Mr. Bennett prepare statements for the committee and for the commission?

A. I think quite probably.

Q. You remember the balance sheet which was offered before the Stevens Investigating Committee for 1904. Who prepared that?

A. There was no balance sheet prepared as of that period for the committee. The balance sheet of that date was submitted to
752 the Senate Committee; and my impression is that the balance book itself was in evidence.

Mr. MATHEWSON: It was produced at any rate.

Q. Do you remember your attention being especially called to the balance book or balance sheet of 1904 before that Investigation Committee?

A. I think it very probable.

Q. Do you remember it more especially being called to your attention in connection with the statement, which was made of the tax report for 1904 before that Investigating Committee?

A. I do remember it.

Q. Now, does that refresh your recollection as to whether that balance book or sheet was prepared or presented by you?

A. As I have already stated, that was not a prepared balance sheet, it was a balance sheet of the company's general ledger, I think, and

was not prepared for presentation to the committee. There may have been a copy made of it and put in evidence, of that I am not sure. I know that the balance was presented or produced rather, but there is no preparation of any balance sheet for that committee.

Mr. BURR: Have you got your complaint with you, Mr. Mathewson?

The MASTER: Here is a copy.

Q. When I speak of a statement in connection with the complaint, I mean a statement purporting to set forth the values of the plant?

A. If you will indicate the statement——

Q. And the details of the sales of gas?

A. If you will indicate the statement—it may refresh my memory, Mr. Burr.

753 Q. Well, I assume before the action was begun that statements were requested from you as to the actual financial condition of the company, as that actual condition would be affected if the new legislation fixing the price of gas at 75 cents to the city and 80 cents to the general consumer, was enforced?

Mr. MATHEWSON: I object to that as immaterial.

The MASTER: Question allowed.

Mr. MATHEWSON: I except.

The MASTER: Do you understand it, Mr. Carter?

The WITNESS: I don't recall that I was called upon to make up any such statement as that.

Q. Do you know who was called upon?

A. I do not.

Q. You testified before the Stevens Investigating Committee?

A. Yes, sir.

Q. You also testified before the Gas Commission, did you not?

A. Yes, sir.

Q. And you have made an affidavit in this case?

A. Yes, sir.

Q. In you supplemental affidavit in the book, "Complainant's Affidavits in Rebuttal," page 37, you refer to your familiarity with the reports of the Legislative Committees between 1885 and 1886, and you called attention to the fact that investigation of the Senate Committee of 1886 lasted nearly a year. Is that a fact?

A. Yes.

Q. That their investigations into the affairs of the Consolidated Gas Company lasted nearly a year, was that the fact?

A. That is my recollection.

Q. And in that affidavit you call attention to the haste with which the investigation before the Stevens Committee was conducted?

A. Yes. Attention was called to that in my affidavit.

754 Q. In consequence of which you say that the elements entering into the question brought before them could neither be fully presented nor deliberately considered by said committee?

A. That is my opinion.

Q. You further say you hazard nothing in saying the members of

the committee themselves will concede the insufficiency of time at their disposal thoroughly and in detail to investigate and determine such important matters. The result was that upon some most material points no evidence at all was before the committee; upon other points evidence was in such incomplete shape that the situation was gravely misapprehended or misconstrued by the committee. That was your opinion then and that is your opinion now?

A. Yes, it was and is.

Q. Then you complain that the commission which was subsequently appointed to investigate this whole subject was harried and hurried by certain journals in the City of New York into a decision which was not a proper one?

A. That is the case.

Q. So that you conclude that at neither of these hearings did you receive that fair and unprejudiced hearing that your company was entitled to?

A. That was my belief as expressed in that affidavit.

Q. And in consequence you suffered grave injustice and grave prejudice?

A. Yes, sir.

Q. And that your company has never received that judicial consideration of its property rights in behalf of which it has sought the interposition of this honorable Court?

A. We were very sure of it.

Q. So that at this time that you speak of, your company desired a thorough investigation into all the affairs of your company?

A. Yes, sir.

Q. For the purpose of sustaining the contention which you make, that the fixing of the price of gas at 75 cents to the City and 80 cents to the general consumer is confiscatory.

A. Yes, that is the case.

Q. And in the affidavit to which I have referred, and
755 which you submitted to Mr. Justice Lacombe, you quoted from the majority report of the Committee of 1886?

A. Yes, sir.

Q. To sustain your contention as to the proper valuation of the property then held by the constituent companies in 1884?

A. Yes, sir.

Q. Do you know whether you were previously asked, Mr. Carter, whether you took any active part in acquiring the properties of the electric light companies for the Consolidated Gas Company?

A. No, sir.

Q. Were you secretary of the Consolidated Gas Company when the first electric light company was acquired?

A. No, sir.

Q. Is Mr. Whiteley an officer of your company?

A. Yes, sir.

Q. What office does he hold?

A. Assistant Treasurer.

Q. Mr. Bennett is also an officer of your company?

A. Yes, sir.

Q. And what office does he hold?

A. He is treasurer of the company.

Q. Are either of these two gentlemen officers of the electric companies?

A. Mr. Whiteley held an office in the United Electric Light & Power Company.

Q. Did you know what the situation was between 1884 and 1894 as regards the gas companies in existence in the City of New York, I mean Manhattan and the Bronx, as to competition?

Mr. MATHEWSON: I object to that as immaterial and irrelevant, not affecting the issues before this tribunal.

Mr. BURR: It is simply apropos of the question asked by Mr. Mathewson of this witness whether the acquirement of these
756 gas companies and electric light companies was not caused through the hostility of these companies.

The MASTER: Question allowed.

Mr. MATHEWSON: I except.

The WITNESS: I was familiar at the time with the existence in New York of other gas companies who were competing with the Consolidated Gas Company, that is to say the Equitable Company, the New York, The East River Company and the Standard Gaslight Company, during that period.

Q. Have you any knowledge of the rate wars which prevailed at that time, during that period between the gas companies of the City of New York?

Mr. MATHEWSON: I make the same objection.

The MASTER: Same ruling.

Mr. MATHEWSON: I except.

The WITNESS: I know that because——

Mr. MATHEWSON: Between 1884 and 1894.

The WITNESS: I am not aware that there was any rate war or any cutting of rates by the companies during that period.

Q. Are you aware of any such rate war or cutting before 1884?

A. No, I am not.

Q. Are you aware of any such rate war or rate cutting subsequent to 1894?

A. Yes, sir. In 1899 the price of gas was reduced by all of the New York gas companies in their efforts to acquire each other's business.

Mr. BURR: I move to strike that out as being a conclusion of the witness. I am asking simply for the facts.

The WITNESS: Well, I know why we did it.

The REFEREE: I will let it stand.

757 Q. You know that it was an attempt of your company to secure the business of the other companies?

A. You had better say to retain our own. It was a defensive rather than an offensive measure, perhaps that would be too fine a

distinction. I only know that the price was reduced more or less by all the companies.

Q. You have characterized it. I take your answer. Whether the rate war was to protect it or to absorb other companies——?

A. I don't know that I would care to indicate where aggression began and defense stopped.

Q. What was the result, the price of gas went down, didn't it?

A. The price was reduced temporarily.

Q. How low was it reduced?

A. I could not say accurately, I think from memory——

Q. To 55 cents or 50 cents?

A. No, I don't think it went as low as that. I don't recall any cases where gas was as low as that.

Q. How low was it sold at according to your best recollection?

A. My best recollection is 60 or 65 cents, something less than the cost of manufacturing and distributing.

Mr. BURR: I simply asked for the facts, and you have characterized it, I move to strike it out.

The MASTER: Motion granted.

Mr. MATHEWSON: I except.

Q. What companies were engaged in this competition or rate war, cutting prices?

A. All the companies in New York.

Q. Outside of the Consolidated Gas Company?

A. Outside of the Consolidated Gas Company. Do you want them named?

The REFEREE: Didn't he name them a moment ago, some
758 of them. Ask him to name the others, if there are any more of them.

Mr. MATHEWSON: Some of these have disappeared by consolidation. They are no longer in existence.

Q. Can you name them, name all the companies engaged in this rate war, the cutting of prices at that time—can you do so?

A. Yes.

Q. Will you do so?

A. The New York, the East River, the Equitable, the Standard, and I think the Mutual Company.

Q. Were they combined against the Consolidated Gas Company?

A. No, not that I am aware of.

Q. Or was the Consolidated Gas Company combined against them?

Mr. MATHEWSON: You could not very well combine one company.

Q. Was the Consolidated Gas Company fighting these other companies, or were the other companies fighting between themselves?

A. Why, all the companies reduced the price of gas, and I think more or less uniformly without any reference to any relationship between themselves.

Q. How low did the Consolidated Gas Company reduce its rate, to 65 cents?

A. 65 I think.

Q. Now how long did that condition continue?
A. My recollection is that it continued for something like a year.
Q. And how was that rate war ended, if you know?
A. I don't know.
Q. Wasn't it by the absorption on the part of the Consolidated Gas Company of these other companies that you have named, through the procurement of a controlling interest in the companies, through the purchase of stock?
759 A. I presume that might have something to do with it, that is perhaps inferential.
Q. Well, you never heard of any rate war after the Consolidated Gas Company acquired the stock of these companies to which you have testified?
A. No, sir, I never did.
Q. As a matter of fact, wasn't it the Consolidated Gas Company which started the rate cutting?
A. As a matter of fact it was not.
Q. Which was it?
A. To the best of my recollection it was the New Amsterdam Gas Company.
Mr. MATHEWSON: You haven't mentioned that.
The WITNESS: It was the New Amsterdam Gas Company at that time, the Equitable and the New York, and East River companies were combined in 1898; the New Amsterdam was at that time in operation. In August, 1898, at the time of the reduction, it was the New Amsterdam which was operating, and it was that company which to the best of my recollection took the initiative in reducing the price of gas.
Q. So that after that there was practically no competition between the gas companies in the City of New York?
Mr. MATHEWSON: I object to that as calling for a conclusion.
Mr. BURR: I will ask him if he knows the fact.
Q. Was there any competition at the end of the year to which you have referred between any of the gas companies in the City of New York?
A. I should say there was, I should say there is to-day.
Q. You claim that to-day there is competition between the
760 gas companies of the City of New York?
A. More or less of it, decidedly.
Q. Do you claim the same condition of competition exists to-day as existed at the end of the rate war to which you have just referred, in 1899?
A. The same conditions prevail as prevailed at the end of the period during which the price of gas was reduced, in the latter part of 1899 and the early part of 1900.
Q. Do you wish to be understood as saying that the New Amsterdam and the Standard and Union are in opposition and competing with the Consolidated Gas Company in the City of New York?
A. I don't know to what extent you can designate it as opposition, but there is always more or less competing for business.
Q. To-day?

A. To-day.

Q. There isn't any statement which has been presented at this hearing, Mr. Carter, which has not been presented in some form to the Senate Investigating Committee and to the Gas Commission——

A. I think the statements that have been presented here are almost identical with those that were presented to the Gas Commission, but there were a great many more presented to the Gas Commission than were presented to the Senate Committee.

Q. And a great many more have been presented than up to the present moment have been presented here?

A. To the Gas Commission?

Q. Yes.

A. I think not, having any particular bearing upon the cost of manufacturing or distributing gas, the value of the company's assets and the company's revenues.

Q. But there were other statements as to the affairs of the company presented than have been presented here?

A. A great many statements were made up, that were purely statistical, in regard to the details of the Engineer's Department,
761 in very great detail, very voluminous, which were simply used, as I understand by counsel, for the purpose of confirming statements that were presented referring to the cost of manufacturing and distributing gas.

Q. That is your understanding of it, but they may have put it to other purposes?

A. I think that they very clearly indicated themselves that was the purpose for which they called for the statements.

Q. Do you recollect maps of the mains of the companies, being presented before the commission?

A. Being presented before the Gas Commission?

Q. Yes.

A. I don't think I do recall that. I don't recall it as a matter of fact. I did not present them myself and I was not present when they were presented.

Mr. MATHEWSON: If they were presented?

Q. Do you know whether they were presented or not?

A. I don't know whether——

Q. Do you know whether they were presented to the Senate Investigating Committee?

A. I don't know.

Q. Do you know where they are now?

A. I do not.

Q. When did you last see them?

A. I don't know that I have seen any maps indicating the mains of the Consolidated Gas Company for several years.

Q. Are you not an officer of any electric light companies?

A. No, sir.

Q. Do you know what territory is embraced in the borough of the Bronx by the Bronx Electric Light Company which is not controlled by the——

A. What is the name of the company?
Q. I was referring to the Bronx Gas Electric Light Company.

Mr. MATHEWSON: The Bronx Gas & Electric Company.

762 Q. I ask can you state what territory that company embraced in the Bronx?
A. No, I cannot.
Q. I call your attention to the balance sheet appearing upon page 86 of the Minutes of the Joint Committee of the Senate and Assembly, Senate Document No. 30——

Mr. MATHEWSON: In 1905.
Mr. BURR: 1905.

Q. —and ask you whether that is a correct transcript of the balance sheet of the Consolidated Gas Company for 1904.
Mr. MATHEWSON: If you don't know, don't say.
The WITNESS: I don't know that it is and would not be willing to say that it is without comparing it with the original balance sheet.

Mr. MATHEWSON: I merely make that remark, Mr. Burr, because this was printed from day to day in haste and we found in comparing that a great many errors have been made in transcription.

Q. Now, I call your attention to that statement appearing there on page 86. Does that refresh your recollection as to whether you prepared that statement there appearing?
A. I tried to make that very plain, Mr. Burr, if it is a balance sheet of the company it is not a prepared statement for that committee. It simply is or is not a correct copy of the company's balance sheet as of that particular date.
Q. It purports to be a correct copy of the company's balance sheet for that particular day.
A. It purports to be, I should say.
Q. Did you prepare, or did somebody else prepare or take it off the books?

763 A. Oh, it was taken off the books by our accountant, checked by me, however, sir.
Q. As to those statements which you have presented here from day to day have they been prepared by your accountant?
A. And checked by me as that balance sheet was. And the balance sheet, which is a matter of record in our balance book, was compared by me with the ledger, and checked as to it being a correct transcription of the balance sheet shown in the general ledger.
Q. I understand you to say that that is a copy of a statement duly presented here and prepared by you or checked by you?
A. No, not in detail, no.
Q. In 1884, do you know at what rate the stock issued by the Consolidated Gas Company was exchanged for the stock of the various other companies that were absorbed by it?
A. No, I don't know.
Q. Do you know whether there was any variation in the rates of exchange, or was it equal with each company?
A. I don't think any two of them were alike, Mr. Burr. That is

my recollection, although I don't recall the amount at which each was exchanged.

Q. Is there any record of the rate at which those stocks were exchanged for stocks in the Consolidated Gas Company?

A. I think quite likely.

Q. Where was that?

A. I would not like to say where it would be, referring to any special record, but I have no doubt there is a record of it. In fact the records of the stock that was issued of each company would appear upon the general ledger and the capital stocks of the companies. That is a matter of record and has been testified to at this hearing, and the application of one to the other would give the average rate at which they exchanged, so after all it is a mere matter of calculation that could be done here.

764 Q. While I have got the original contracts here I want to call attention to the item of lamps. In Exhibit No. 94 there is an item of street lamps, $289,259.09, and it appears by the Exhibit in the column headed "Cost per thousand cubic feet sold" that it is charged against the thousand cubic feet sold at 2.18 cents?

A. Yes, sir.

Q. I understood you to say yesterday or the day before that this item represented the work of the Consolidated Gas Company in maintaining and repairing the street lamps of the city?

A. Over and above the amount charged the city for repairing, erecting, removing and resetting lamp posts.

Q. This amount is charged over and above those items?

A. Over and above the amount charged for those items, which are a credit in this account.

Q. Is this for lanterns or lamps purely and simply?

A. It is not a charge for the lanterns, no, I don't think there is any charge of that nature in there. It includes the labor and material employed in the maintenance of the lamps; that is, the lighting, extinguishing, reglazing, painting and inspecting and work of that kind is included in that amount.

Q. Well, contracts have been made with the city for this work, have they not?

A. At the present time I don't think the contract with the city provides for a supply of gas and lighting and maintaining the city lamps. My impression is that the only contract we have with the city to-day covering the present period is a contract for the repairing of the lamps and for the maintenance of the lamps.

Q. Do you know how many lamps the company lights and maintains and repairs?

A. Between 22,000 and 23,000.

Q. In the Borough of Manhattan?

A. In the Boroughs of Manhattan and the Bronx.

765 Q. Is it not a fact that some of these public lamps are located on the mains of different companies?

A. Yes.

Q. Embraced by the Consolidated Gas Company?

A. Yes, sir.

Q. How do you regulate the supply of gas from each company to the public lamps?

A. Why, the gas that we are charged for by the other companies as being made for us under the agency agreements includes the gas that is supplied to these public lamps.

Q. But you have no record specially of the amount of gas supplied the lamps?

A. No.

Q. Is there any record any place showing what lamps are supplied by the particular mains of the particular companies?

A. I think there may be such a record.

Q. Well, do you know whether there is or not?

A. No, I do not.

Q. Who would know about that?

A. I think Mr. Simpson might, if there is a record of that kind.

Q. Now if the City as a matter of fact pays for all this work, then this 2.18 cents is not a proper charge against the cost per thousand cubic feet sold, is it?

Mr. MATHEWSON: Objected to on the ground it is purely a conclusion.

Objection overruled; exception.

A. We treat this expense of maintaining the lamps as an expense, as an operating expense, and it is included in our operating expenses upon the same theory that we would include in our operating expenses the cost of doing any work for any other consumer, and we consider that the revenue from the City is properly included in our gross receipts.

Q. Well, do you wish to be understood as saying that this repair work affects the cost of gas to your company?

766 A. The repair work would not affect the cost of gas unless the labor and material employed in the repair work exceeded the amount that we charge the City under the contract at so much per unit of work performed in connection with the repairing, erecting, resetting and removing of lamp posts. If the amount that we expended exceeded the amount we have charged the City, we would consider that that variation was an expense to the gas business.

Q. If a third party had a contract for repairing and maintaining the lamps as lamps, it would not affect your business at all?

A. It would not affect our business at all, decidedly not.

Q. If the city pays you in full for that work how is it charged up against the cost per thousand cubic feet of gas sold?

A. Assuming that the amount that we expend for labor and material in connection with the repairs and erection and removing and so forth of the lampposts is exactly offset by the amount that we charge the city for the work, then the balance in here would represent maintenance and nothing else.

Q. The contract will show the exact agreement I presume, won't it?

Mr. MATHEWSON: You have the contract. You are representing

the party that has the contract. It seems to me that should be produced.

Mr. BURR: Yes.

Q. Will you glance at the paper I now show you and say what paper that is, and if you recognize the signatures attached to it, your own among the number?

A. The paper that I have before me is the bid or estimate of the Consolidated Gas Company for furnishing gas or other illuminating material for, and for lighting, extinguishing, cleaning, repairing and maintaining the public lamps (and supplying gas, etc., for
767 new lamps, when required) and for making certain repairs to lamp posts, and for furnishing burners and appliances of improved system on streets, public buildings, avenues, piers, parks and public places in the Borough of Manhattan in the City of New York, for the term of one year from March 16, 1904, to March 15, 1905.

Q. Signed by you?

A. It is signed by Mr. W. R. Addicks, the Vice-President of the company, and the seal of the company which is attached to the bid is attested by me as secretary.

Mr. BURR: I offer that in evidence.

Received in evidence and marked City's Exhibit 2.

Q. Will you kindly look at the paper I now hand you and say what that is, and if you recognize the signatures attached to it?

A. This paper is the bid or estimate for furnishing gas or other illuminating material for, and for lighting, extinguishing, cleaning, repairing and maintaining the public lamps (and supplying gas, etc., for new lamps when required) and for making certain repairs to lamp posts, and for furnishing burners and appliances of improved system of lighting on streets, public buildings, avenues, piers, parks and public places in the Borough of the Bronx in the City of New York, for the term of nine months and sixteen days from March 16, 1905, to December 31, 1905, both inclusive. This bid or estimate is signed by Mr. W. R. Addicks, vice-president, and the seal of the company, attested by Mr. Colin C. Simpson, the assistant secretary.

Mr. BURR: I offer that in evidence.

Received in evidence and marked City's Exhibit 3.

Q. Look at the paper I now hand you and state if you
768 recognize the signatures attached to it.

A. The signatures are those of Mr. W. R. Addicks, vice-president, and Colin C. Simpson, the assistant secretary of the company, and the seal of the company is affixed and attested by Mr. Colin C. Simpson, the assistant secretary. The paper is a bid or estimate for furnishing gas or other illuminating material for, and for lighting, extinguishing, repairing, cleaning and maintaining public lamps (and supplying gas, etc., for new lamps when required) and for maintaining certain lamps and lamp posts and for furnishing burners and appliances and approved system of lighting on the

streets, public buildings, avenues, piers, parks and public places in the Borough of Manhattan, City of New York, for the term of nine months and sixteen days from March 16th, 1905, to December 31, 1905, both inclusive.

Mr. BURR: I offer that in evidence.
Received in evidence and marked City's Exhibit 4.

Q. Do you know as a matter of fact whether the contract which was made by the Welsbach Company for the Borough of the Bronx was assigned to and taken over by your company for that year?
A. Yes, sir, it was.
Q. For 1904?
A. Well, I wouldn't like to say for the exact period without the contract itself or the assignment. There was such an assignment to the Consolidated Company by the Welsbach Street Lighting Company of America, but without having the documents before me I would not like to testify as to the period it covered.

By Mr. MATHEWSON:

Q. Isn't it your impression that it covered from March 16, 1904, to March 15, 1905?
A. That is my impression.

769 By Mr. BURR:

Q. Do you recognize the signatures attached to the contract and specifications between the Consolidated Gas Company and the city of New York which I show you, Mr. Carter, which are annexed to City's Exhibit No. 2, and covering the same period and same territory?
A. Yes, sir, the signatures are familiar to me.
Q. Signed by the officers of the company? That contract and specifications are signed by the officers of the Consolidated Gas Company?
A. Yes, sir.

Mr. BURR: I offer the contract and specifications in evidence.
Received in evidence and marked City's Exhibit 2A.

Q. And signed by the United States Fidelity and Guaranty Company?
A. As bondsmen for the company under the contract.
Q. I call your attention to this paper and ask you to look at it and state whether or not that is not a contract made between the City and the Welsbach Company for the lighting of the Borough of the Bronx, which was subsequently assigned and taken over by the Consolidated Gas Company, and whether the assignment to the company is not attached to that paper, duly signed by the officers of the company?
A. It is the bid and estimate, and attached to it is the proposal and contract, both covering the Borough of the Bronx, for the period from March 16, 1904, to March 15, 1905, and attached to it is the assignment of the contract to the Consolidated Gas Company.

Q. That was with the consent of the city? The consent of the city is also attached there, is it not?

A. It is the consent of the city, signed by John T. Oakley, Commissioner of Water Supply, Gas and Electricity.

770 Q. And the other papers you have also identified were signed by Commissioner Oakley?

A. Yes, sir.

Mr. BURR: I offer those papers in evidence.

Received in evidence and marked City's Exhibits as follows: Bid and Estimate, Exhibit 5; Proposal and Contract, Exhibit 5A; Assignment of the Contract, 5B; Consent of the Commissioner, dated July 1, 1904, 5C; Contract, Exhibit 5D.

Q. Do you recognize the signatures attached to the contract and specifications between the Consolidated Gas Company and the City of New York which I show you, Mr. Carter, which are annexed to City's Exhibit 3, and cover the same period and same territory?

A. Yes, sir, the signatures are familiar to me.

Q. Signed by the officers of the company? That contract and specifications are signed by the officers of the Consolidated Gas Company?

A. Yes, sir.

Mr. BURR: I offer the contract and specifications in evidence.

Received in evidence and marked City's Exhibit 3A.

Q. Do you recognize the signatures attached to the contract and specifications between the Consolidated Gas Company and the City of New York which are annexed to City's Exhibit 4, covering the same period and same territory?

A. Yes, sir, the signatures are familiar to me.

Q. Signed by the officers of the company? That contract and specifications are signed by the officers of the Consolidated Gas Company?

A. Yes, sir.

Mr. BURR: I offer the contract and specifications in evidence.

771 Received in evidence and marked City's Exhibit 4A.

Q. Now, look at these two papers which I hand you and state what they are, if you know, and whether you recognize the signatures attached to them?

Mr. MATHEWSON: We will not ask you to prove their signatures if they are signed by the proper parties; we are willing to assume that the signatures are genuine.

A. These are proposals or estimates, the bid or estimate, and the contract and specifications for maintaining, furnishing and repairing gas lamps, &c., in the Borough of Manhattan.

Q. Between whom?

A. Between the Consolidated Gas Company and the City of New York, executed by W. R. Addicks, Vice-President, and attested by myself as Secretary.

Q. Covering what period and what territory?

A. Covering the period from February 1st, 1905, to December 31st, 1906.

Q. For what Borough?

A. Borough of Manhattan.

Mr. BURR: I offer them in evidence.

The papers mentioned by the witness were received in evidence as one complete document, and marked City's Exhibit 6.

Q. Now, will you look at the other paper I have handed you and state what that is, and whether you recognize the signatures attached to it.

A. These are the proposals for bids or estimates, the bid or estimate, and the contract, the specification being attached, for furnishing, maintaining and repairing of gas lamps, &c., the contract
772 being between the Consolidated Gas Company and the City of New York, which was executed by W. R. Addicks, Vice-President, the seal of the Consolidated Gas Company, which is affixed being attested by myself as Secretary of the Company. The bid or estimate covers the period from Feb. 1, 1905, to Dec. 31, 1906, both inclusive.

Q. For the Borough of the Bronx?

A. Yes.

Mr. MATHEWSON: How about the contracts?

The WITNESS: Reference has been made to it.

Mr. MATHEWSON: But you do not say that the contract covers that period; do not they all cover the same period?

The WITNESS: The contract also covers the period from February 1, 1906, to December 31, 1906.

Mr. BURR: I offer the papers in evidence.

The papers described by the witness were received in evidence as one complete document and marked City's Exhibit 7.

Q. I call your attention to the contract marked City Exhibit 7, reading "for furnishing gas lamps, &c., on the streets, &c., and for connecting, lighting, extinguishing, cleaning, repairing and maintaining the same, and also lamps belonging to the city, supplying new lamps when required, and for furnishing burners and appliances of improved system of lighting the streets, avenues, and public places in the Borough of the Bronx." Does that describe the charge represented by this item: "Street lamps, $289,259.09," in Complainant's Exhibit 94?

A. May I see it, please, the contract referred to?

The paper marked City Exhibit 7, being the proposals for bids and estimates or the estimate, and contract for furnishing,
773 maintaining and repairing of gas lamps, &c., in the Borough of the Bronx, in so far as the Consolidated Gas Company's bids were concerned, and the contract as ultimately executed was concerned, covered but one item only of the general heading, "Furnishing, maintaining and repairing of gas lamps," etc.; as far as open flame gas lamps are concerned, it covers the maintaining only; so far as the mantle lamps are concerned, everything as stipulated

in the bid or estimate, as originally printed, was to be furnished by the company. All material and labor employed under this contract would be charged against the street lamp account as shown in Exhibit No. 94.

Q. Is there anything else embraced in Exhibit 94 besides the items that are stated in that paper from which you have been testifying, City Exhibit 7?

A. Yes, other things are included.

Q. Will you name them?

A. Any expenditures for material or labor made in carrying out the contract marked City's Exhibit 6 would be charged against that account.

By Mr. MATHEWSON:

Q. Do the same remarks as apply to Exhibit No. 7 also apply to Exhibit 6, as to what was covered by them, one being for the borough of Manhattan and the other for the borough of the Bronx?

A. Exhibits 6 and 7 are identical in that they are both copies of the original contract for maintaining and furnishing and repairing the gas lamps, etc., the only difference between the two is the matter of territory. There are two other contracts that have been put in evidence in addition to these, and all the material and labor employed under these contracts, which are for the repairing, erecting, removing and resetting of posts, is charged to this account in Exhibit No. 94.

774 Q. So far as it comes within the period covered by Exhibit 94?

A. So far as it comes within the period covered by Exhibit 94; that is, the calendar year of 1905.

By Mr. BURR:

Q. Now, you make a charge; where does the receipt appear?

A. If you say strictly receipts—if the City were paying for this service the receipt would be indicated in the account in which they are charged for the service.

Q. But I understood you to say the other day, and what you say now rather confirms my recollection, that the City paid nothing for this service; is that right?

A. This is the case, but, notwithstanding they do not pay, we go right on charging for the services just the same.

Q. And what is the idea of charging, if they do not pay?

A. Well, to get their obligation to the company on record in our books and in their own records.

Q. Would it make any difference if they paid?

A. Not a particle, except that the evidence of that obligation to us would be extinguished by their payment of the bills rendered.

Q. Don't you consider that the City is obligated to pay?

A. Decidedly I consider that the City is obligated to pay.

Q. For this work for which you make this charge in Exhibit 94?

A. Precisely. Let me explain that when we make a bill and charge the city we credit the street lamp account for the amount

that we bill the City for the repairs and for erecting and removing and resetting lamp posts.

By Mr. MATHEWSON:

Q. If you did not, the $289,259.09 item would be a great
775 deal larger, would it not?

A. Very considerably larger.

Q. In other words, you carry that in the amount you consider due to you from the city, as an earning in your books, the same as though it were paid, do you not?

A. As a receipt, as though it were being paid. As far as this street lamp account is concerned, it is credited there the same as though the city were paying the bills.

Q. And by that credit the amount is reduced to the $289,259.09 that appears in Exhibit 94?

A. Yes.

By Mr. BURR:

Q. Now, referring to City's Exhibit 2A, it was provided by the contract made between the Consolidated Gas Company and the City of New York for the Borough of Manhattan, running from March 16, 1904, to March 15, 1905, that the price for single incandescent mantle gas lamps would be $24.75 per lamp for a single order for 22,500 lamps?

A. Those are the terms of the contract, yes.

Q. Now, I think you have already testified that this charge in Exhibit No. 94 is an estimated one, based upon the amount of gas the city consumes?

A. No, I have not testified to anything of that nature whatever.

Q. Then, I ask you with regard to it particularly: Under the contract to which we are now referring, City Exhibit 2A, lamps were to consume three cubic feet of gas per hour and were to burn 3,925 hours; is that true?

A. That is the case.

Q. And the contract price included the cost of gas?

A. Yes.

Q. And on this basis would not the theoretical consumption of gas cost 10.59¾ cents per year, leaving 14.15¾ cents to defray the cost of supplying, maintaining, repairing, lighting, cleaning
776 and extinguishing of the lamps?

A. I do not know how you arrive at those figures.

Q. In other words, did not this contract include the care of lanterns, and repay the Consolidated Gas Company for any expenditure they might have put out on that account?

A. The price that the city was to pay per lamp per annum was supposed to reimburse the company for the gas supplied the lamps, and for the labor and materials employed in the maintenance of the lamps.

By Mr. GANS:

Q. It did, didn't it?

A. It presumably did; as far as the amounts stipulated in the

contracts are concerned. Of course the amount that we received from the city is another proposition.

By Mr. BURR:

Q. Did not this contract include the care of lanterns, and did it not by its terms repay the Consolidated Gas Company for any expenditure that your company may have put out on that account?

Mr. MATHEWSON: We object to this on the ground that the contract itself shows. This is a construction of the contract that the witness is called upon to make, and I do not think it is accurate anyway.

The MASTER: I will let him answer it as far as he can.

(The question is repeated by the stenographer.)

Mr. MATHEWSON: I would make a further objection. The contract does not provide, as you will observe, by its terms that it shall repay the Consolidated Gas Company for any expenditures that it has put out on account of lamps. It simply provides that it shall pay the Consolidated Gas Company $24.75 for lamps, in-
777 cluding care and maintenance. I submit that the form of that question is objectionable and that the conclusion asked of the witness is rebutted by the very terms of the contract itself. There is nothing like that in the contract. Is it fair, therefore, to ask the witness to characterize it in that way, with the written contract before us? If he said it is, it would not make it so. The contract shows precisely what it provides.

The MASTER: The question of course is objectionable as to form, for the reasons that you have stated; but in view of the point that Mr. Burr has been making here about this Exhibit No. 94, it seems to me that the witness can go on and answer it in such a way as to protect himself, explaining as far as he may desire the two items in the account to which his attention is called.

Exception taken by Mr. Mathewson.

A. All I can testify to in that connection is that the amount that we charge the city, $24.75 per lamp per annum, was supposed to reimburse us for the cost of the gas supplied to these lamps, and the cost of the labor and material employed in maintaining them.

By Mr. GANS:

Q. By cost of gas, you mean charged at your regular price to the city under the law?

A. I have said nothing about charging cost of gas. I said that it was supposed to reimburse us for the gas supplied to these lamps; I say it is supposed to do it; but whether it does or not, I confess I do not know.

778 By Mr. BURR:

Q. As I understand the distinction which you draw, if the city claims that this figure of $24.75 specified in this contract was to reimburse the cost of the supply, maintenance, repair, lighting, cleaning and extinguishing of the lamps, the city is mistaken?

A. Well, I think that if you consult Mr. Lacombe he can probably explain the difference between those two contracts. We made a contract with the city for supplying gas to, and the lighting, extinguishing and maintenance of the lamps, and we made a contract with the city for repairing, erecting, removing and resetting lamp posts. There are two separate and distinct things. The charge of $24.75 for mantle lamps was supposed to cover the gas supplied to the lamps and the maintenance of the lamps, the furnishing of mantles to the lamps and the care of the lamp heads, lighting, extinguishing, glazing, painting and work of that character, but it was not supposed to cover the cost of repairing the lamp post or removing it, or resetting it, or erecting posts.

Q. I call your attention to this section 7 in the contract marked City Exhibit A.

"VII. For repairs of lamp posts and erection of new lamp posts.

A. For each lamp post straightened, the sum of $1.50.

B. For each column releaded, the sum of $2.50.

C. For each column recaulked, the sum of $1.00.

D. For each column refitted, the sum of $3.50.

E. For each service pipe refitted, the sum of $5.50.

F. For each stand pipe refitted, the sum of $2.50.

779 G. For each lamp post removed, $3.50.

H. For each lamp post reset, the sum of $8.00.

I. For each new lamp used for gas lamps, fitted up completely and fitted with new lamps, $8.00; boulevard lantern additional, $6.00; total, $14.00."

Is there any other item embraced that has not been stated in this contract, as far as the repairs of lamps are concerned. I mean embraced in that item set forth in Exhibit 94?

A. No, the contract there covers all the charges against this street lamp account shown in Exhibit 94 for what I have been referring to as repairs, removing, resetting and erecting lamp posts.

Q. Is everything for which you charge in this Exhibit embraced in these items which I have just read off from this contract, City's Exhibit 2A, or is there still something further which you do to the lamps and which you charge up to the city?

A. Yes, decidedly; the maintenance of the lamps is a charge against the same account and does not appear among those items which you have read at all; it is covered by a contract to supply mantle lamps at $24.75 per lamp per annum.

Q. Yet, the contract and specifications which are signed by your company, and are City's Exhibit 2A offered now, and which you have identified, read "For furnishing gas or other illuminating material, and for lighting, cleaning and extinguishing and repairing public lamps, &c." How do you explain that if maintaining is not embraced in this contract, and in addition to what I have read in this contract you still charge over and above the items specified in this contract.

A. Maintaining lamps and repairing lamp posts are two different things. Even in regard to repairing lamps, I presume the

780 city draws some distinction between the term "repairing lamps" and "repairing lamp posts."

Q. Let us simplify this thing. The city owns the lamp posts, does it not, or doesn't it?

A. It does.

Q. Does the city own the lamps?

A. In the case of mantle lamps, no; in the case of flat flame lamps, yes.

Q. How many mantle lamps are there in the city owne- by the Consolidated Gas Company?

A. I think somewhere between 22,000 and 23,000.

Q. Owned by the company?

A. Lamps owned by the company, not the Consolidated; the Welsbach Street Lighting Co.

Q. Now, in this contract, the gas is provided to be supplied to these public lamps at 90 cents, is it not?

Mr. MATHEWSON: Is it, by that contract?

Mr. BURR: Public buildings.

Mr. MATHEWSON: That is just where you miss the distinction. The $24.75 is to furnish the gas and maintain the lamps, and specifies no rate per thousand feet for the gas. It is a lump bid to cover maintenance and gas furnished.

Q. Do you charge more than 90 cents to the City for gas under the contract?

A. You are referring now to the lamp contract?

Q. Yes.

A. We do not charge the City anything for gas directly; the contract covers the supply of gas in the charge of $24,75 per lamp per annum.

Q. Have you ever rendered any separate bill to the City for any work done which is not specified in this contract, City's Exhibit 2A?

A. I think it quite possible.

Q. As a matter of fact have you ever made any charge against the City over and above what the City has undertaken and
781 agreed to pay under this contract, for that time and for that territory?

A. Yes, I think that we have.

Q. For the Borough of Manhattan, from March 16, 1904, to March 15, 1905?

A. Yes, I should say right during that period we made a charge to the City that is not in any way covered by the items enumerated in the contract referred to.

Q. What was it?

A. Well, I have in mind one item; I would not say there are not others. At the request of the City we removed all the lamp heads belonging to the City from the City's lamp posts, and took them to a designated place of storage, and for that service we charged the City, and I do not believe they ever paid us.

Q. That was paid off, was it not?

A. Mr. Simpson says it was; I did not know that they had paid anything.

Q. So that this could not be included in this charge on Complainant's Exhibit 94?

A. No; if it had ever appeared there as a charge it would have been offset by the amount of the bill rendered to the city for the service.

Q. I want to get this thing clear. Is this charge of $289,259.09, over and above any charge that you make against the city?

A. Why no, it is not, by any manner of means; it is over and above any charge that we make against the city for repairing lamp posts.

Q. Then this item should be for repairs to street lamp posts?

A. I do not know why.

Q. The city pays you for the gas, it pays you for maintenance, and pays you for repairs under the contract; now, what else is there to be charged against the city?

A. I do not want to be captious, and say that they do not pay for any of these. We charge the city for gas maintenance and repairs; the charge for maintenance and repairs appears as
782 a charge against this particular street lamp account; the credit to the account being the amount of the bills rendered to the city for repairs.

Q. So that I may get it clear, I want you to itemize it. There is a quarter of a million dollars that you make as a charge for street lamps, and the city is under the belief that the contract made with you for the street lamps covers everything?

Mr. MATHEWSON: It does; that is just the point. The charge is a lump charge of $24.75 to cover the furnishing of gas and the maintenance of the lamps, as far as the greater part of our city lighting goes.

Q. This is a charge, as I understand it, which they have not been paid? Is that your claim?

A. No, I have not testified to anything of the sort.

Mr. MATHEWSON: We are not claiming from the city anything more than the contract calls for.

Q. Has this amount been paid to you, $289,259.09, for street lamps?

A. No, it has not.

Q. It is still due, is it?

A. It is still due, though whether it were due or not would not affect this charge.

Q. We left off at the time of the rate cutting or the rate war between the companies, and I understood you to say that when in 1900 that cutting ceased there was no longer any trouble between the gas companies and the City of New York?

A. That is substantially the case, yes.

Q. Now, what year was it that that Consolidated Gas Company undertook to absorb the electric light companies?

A. The date of the purchase by the Consolidated Gas Company of the capital stock of the New York Gas, Electric Light,
783 Heat & Power Company is a matter of record in the testimony; my recollection is that it was in January, 1900.

Q. The meeting of the stockholders was in January, 1900. You were there, were you not?
A. Yes, sir, I was there.
Q. Was the Consolidated Gas Company solvent the year before that?

Mr. MATHEWSON: I object to that as irrelevant.
The MASTER: He may answer if he knows.
Exception taken by Mr. Mathewson.

A. Yes.
Q. Did it have a surplus?
A. It had a surplus.
Q. Had it a surplus the year before that?
A. Yes.
Q. And had it a surplus for several years before 1900?
A. Yes.

Mr. MATHEWSON: The same objection and exception to this line of testimony, I presume, if the Master allows it?
The MASTER: Yes.

Q. Do you know or can you state what the object was in acquiring the Electric Light Companies by the Consolidated Gas Company?
A. No.
Q. Was there any necessity for increasing the capital stock to improve the plants used in the production of gas in 1900?

Mr. MATHEWSON: I object to this as immaterial and irrelevant. The issue of the stock has been shown, and I think the application of it also.
The MASTER: I suppose that is a matter of argument. I will allow him to answer it as far as he can.
Exception taken by Mr. Mathewson.

784 A. Other necessities for the issuing of stock than the acquiring of stocks of other companies existed at that time.
Q. Before we dismiss the subject of street lamps, I ask for a detailed statement of that item. Can we have it?

Mr. MATHEWSON: You have the books showing the whole thing, showing the credit to the account and everything.
Mr. BURR: The operating ledger?
Mr. MATHEWSON: Yes.
Mr. BURR: Very well then.

Q. Calling your attention to Exhibit 93, the item "Profit and Loss Adjustment, $4,101.12," Exhibit 93 being the summary of operations for the nominal year ending October 31, 1905, and then calling your attention to Complainant's Exhibit 94, summary of operations for the calendar year 1905, "Profit and Loss Adjustment $7,508.39," can you give a detailed statement of these accounts?
A. I can tell practically what is in them. They are both credit items you will understand, and operate to reduce the cost shown in this statement and would include any profit arising from our gas

stove transactions, any overrun in our distribution material and supplies, and other small items of credit that we do not apply to any particular operating account because they are so general in their nature.

By Mr. MATHEWSON:

Q. That is a credit and operates to reduce the operating cost?
A. That is a credit.

By Mr. BURR:

Q. I notice in Exhibit 93 another item of "Profit and Loss Adjustment, $8,260.96," and the same item in Exhibit 94 is
785 $29,683.92. Can you give me an itemized statement of these two accounts?

A. Yes, sir, very readily; they are both credits, you understand, operating to reduce the cost.

Q. But you cannot give me a statement now.

A. I could only say in a general way what is included. Our inventory of materials and supplies indicate we have more stock on hand at the end of the year than we had at the beginning, so it involved a credit to this account.

Q. I call your attention to another item of Automobile——

Mr. MATHEWSON: Do you still want the detail of that?
Mr. BURR: Yes.

Q. I call your attention to another item of automobiles, in Exhibit 93, $4,354.26, and in Exhibit 94, it is put down as $5,064.16. I would like to have a detailed statement of the use of the automobiles. What were they used for?

A. Well, we will make up a statement.

Q. I want to find out if they are used for the Astoria works or used for the gas works.

A. I can explain that they are used by our superintendents to facilitate their going to and from the different manufacturing stations and from different points in the street where the mains are being repaired or being extended, used exclusively almost for that purpose, and not at all in connection with Astoria.

Q. They do not use automobiles when they go to Astoria?

A. I doubt very much if they would more than go to a ferry in one. My impression is that the roads in Astoria prohibit the use of a machine.

Q. I call your attention to item in Exhibit 93, entitled "Advertising and legal, $62,861.02," and to the same item on Exhibit
786 94, being $105,800.02. Can you give me an analysis of these accounts?

A. Yes, sir.

Q. I call your attention to the item of "real estate rents, $51,558.12," in Exhibit 93, and in Exhibit 94 it is put down at $42,674.71. Can you explain the difference between the two items?

A. No, not from my recollection of the details of the account. I should have to check it up and I will do so and furnish you with a memorandum of just what it is.

Q. Here is a very large item in Exhibit 93, with simply the word "Expense" before it, amounting to $583,278.52, and in Exhibit 94 it is put down at $490,855.36. What do you mean by expense. What kind of expense?

A. Well, in this particular case it comprises the expenses of the branch offices, including salaries, incidental expenses and possibly some other expenses, although I am not aware of it. My understanding is that both accounts are identical and they include the branch office expenses and incidental expenses—salaries and incidental expenses. That is being taken off in some detail now, that particular amount, that $490,855.36 by the accountants for the State, and they have offered to furnish Mr. Hayward with a copy of the statement they are making up. Will that answer your purpose?

Q. I think so. That will contain a detailed analysis and items to show the account, will it?

A. Yes, sir.

Q. Now, take the item in Exhibit 93, "Distribution $285,273.04," and the same item appears in Exhibit 94 as $281,524.12. What is embraced in that word "Distribution"?

A. Setting of meters, the setting of gas stoves, jobbing, miscellaneous work performed by the fitting shops, including the material that is used, and putting on burners and work of that nature.

Q. Well, is that item which appeared also in Exhibit 93,
787 Repairs to Gas Stoves, $52,063.05, embraced in that item of $285,273.04?

A. No, sir, I said nothing about repairing stoves. I said the cost of setting stoves. That is quite a different item from repairing.

Q. You mean by setting, supplying, placing them in the houses?

A. Placing them in the houses.

By Mr. MATHEWSON:

Q. So, too, setting meters is distinguished from repairing?

A. Yes, sir.

By Mr. BURR:

Q. Is the setting of meters a large item?

A. Well, that is rather a flexible term. I don't know how you might consider that.

Q. Does it cost more than repairing them?

A. I should venture to say no, that the cost of repairing meters is greater than the cost of setting them.

Q. There is a charge for the meters themselves as distinguished from setting them, is there?

A. Yes, sir. For the meters themselves?

Q. Yes.

A. The meters themselves are our property, they appear as property in our statement of assets.

By Mr. MATHEWSON:

Q. They would not appear in the operating account?

A. Not at all.

By Mr. BURR:

Q. Where would the money expense for meters appear?
A. In the property account.

Mr. MATHEWSON: Be very careful how you answer. The money expended on meters, do you mean for the purchase of meters,
788 Mr. Burr, or expended in the repair of meters for instance?

Mr. BURR: I was just about to proceed to distinguish with regard to the meters. There is a cost for the meters themselves, there is a cost for setting them and there is a cost for repairing them.

Q. So evidently there are three charges against meters?
A. Yes, that is the case.
Q. I have asked you with regard to the charge for meters themselves and you say that would appear in the property account?
A. Yes, sir.
Q. The other item, Repairs to gas stoves, in Exhibit 93, is $52,063.05, and in Exhibit 94 it is $55,954.35. Can you say offhand what is the operation charge against the company, for repairs to gas stoves?

Mr. MATHEWSON: You mean within this period, Mr. Burr, or some other?

A. We well say the calendar year of 1905?
Q. Yes.
A. Well, according to the statement of cost of repairing stoves during that period, the average monthly cost would be something like $4,675, something of that sort.
Q. Do you know how many gas stoves the Consolidated Company has in operation or rented out?
A. Yes.

The MASTER: That has been testified to before.

Q. Now I find an item on Exhibit 93, "Contingent expense and depreciation," and it is there stated as $1,114,236.38, and in Exhibit 94 it is stated to be $1,328,316.37. Can you explain that difference, Mr. Carter?

A. Yes, sir, the item in Exhibit 93, Contingent expense
789 and depreciation, $1,114,236.38, includes the estimated contingent expense for the ten months of 1905, included in this statement, calculated at 10 cents per thousand cubic feet, during that period. And also the actual expenditures for rental and replacement during the two months preceding the month of January, 1905.
Q. The contingent expenses alone are figured at 10 cents per thousand cubic feet sold?
A. Yes, sir.

By Mr. MATHEWSON:

Q. Including any renewals——
A. Including any renewals and replacements that occurred during the ten months of 1905.

By Mr. BURR:

Q. How much of that ten cents for instance is apportioned to renewals and replacements?

A. The amount of estimated contingent expense for the ten months ending October 31, 1905, includes the $107,144.40 of actual renewals and replacements during that period. The total expenditures during the nominal year ending October 31, 1905, for renewals and replacements were $194,666.87, or 1.46 cents per thousand cubic feet sold during the period.

By Mr. MATHEWSON:

Q. Included in the total item to which your attention has been directed?

A. Not all included there, because a part of it appears as an item under the production expense of $51,532.36, being the production repairs and renewals during the two months of November and December 1904.

By Mr. BURR:

Q. Now, in that item for the two months additional, as appears on Exhibit No. 94, there is a difference of over $214,000
790 charged up against that account of contingent expense and depreciation for those two months alone, isn't that so?

A. (No answer.)

Q. In Exhibit 93, being summary of operations for the nominal year ending October 31, 1905, the contingent expense and depreciation appear at $1,114,236.38, whereas the same item for the calendar year of 1905 in Exhibit 94 appears to be $1,328,316.37. As I figure it out, that makes a difference for the two months of November and December of over $214,000, isn't that so?

A. Well, it would not be fair to compare those two amounts, Mr. Burr. In one case we are dealing with the calendar year and a uniform charge of contingent expenses of 10 cents per thousand cubic feet sold during the year, in the other case we are dealing with the estimated contingent expense for the ten months, and two months of actual expenditure accruing for November and December, 1904, amounting to $87,522.47.

By Mr. MATHEWSON:

Q. And that is considerably less than 10 cents per thousand cubic feet for the gas sold in those two months?

A. Oh, very much less, yes, sir.

By Mr. BURR:

Q. But it would be a simple matter, would it not, to produce a statement showing the figures or method by which you arrived at that increased charge against the account for those two months from October to December, from October to the end of the calendar year. In other words, you could very readily figure up and give the exact figures whereby the item in Exhibit 93 for the contingent expense

and depreciation is increased to the large extent of over $214,000 in Exhibit 94?

791 A. You will observe, Mr. Burr, that further up the column in Exhibit 93, under the heading of depreciation, there is——

Q. You mean that item of $51,532.36?

A. There is recorded an expenditure of $51,532.36. That was the cost of the actual renewal at the manufacturing stations during the months of November and December, 1904. That should be added to the $1,114,236.38, the amount that you have been referring to, to get the total for the year ending October 31, 1905.

Q. Then these two items of $51,532.36 which appear on Exhibit 93, and this item to which you have just referred of $87,522——

A. No, no. The $1,114,236.38, the total, would be the total amount charged in the statement for the nominal year ending October 31, 1905, for further contingent expense or actual renewals and replacements.

By the MASTER:

Q. And that deducted from this amount in Exhibit 94 would show the actual excess of one over the other?

A. Would show the excess of one over the other.

By Mr. BURR:

Q. Can you tell me all that is embraced in contingent expense, what you mean by contingent expense?

A. Accidents, among other things.

Q. Well, accidents and the loss of trade?

A. No, I don't think I mentioned loss of trade.

Q. Well, would you for the information of court and counsel for the City and the State make up a statement setting forth the reason and the figures going to make up that difference between Exhibit 93 and 94, for that item?

A. Yes, sir.

Mr. MATHEWSON: Nothing, Mr. Burr, will make it any

792 clearer than it is. I don't think you quite understand it. The witness is a book-keeper. If you permit me to put it in lay language, as I understand it, it is this: Beginning the first of January, 1905, we charged 10 cents per thousand feet to cover contingent expenses and also replacements and renewals.

Mr. BURR: For how long?

Mr. MATHEWSON: Each month, ten cents a thousand, so that the statement for the year 1905, Exhibit 94, is simply the number of feet sold multiplied by the ten cents, and that includes in that ten cents the expenditure for the replacements and renewals made, and the balance of it you can call contingent. Now, for the nominal year ending October 31, 1905, we had only ten months of that ten cent rate to make up that item there, don't you see, and for the first two months of that nominal year, that is, November and December, 1904, instead of charging ten cents per thousand feet we charged the actual expenditures for the replacements which were considerably less than ten cents. Therefore that total would appear naturally

considerably less than for the calendar year 1905, because we have ten months of the ten cent rate only in the nominal year ending October 31st, and for the calendar year we have twelve months at ten cents.

By Mr. BURR:

Q. Are you satisfied with that explanation?

A. Oh, yes, sir, it is very lucid, much better than I could possibly make it.

Q. In view of the statement which has just been made by Mr. Mathewson, I call your attention to the statement made by you on page 622 of the record, in which, speaking of this charge for
793 depreciation, you say to all intents and purposes, this ten cents per thousand that you charge every month includes only the amount that was actually expended for renewals and replacements?

A. It was a misprint. It should say "also," instead of "only." My statement has been corrected.

Q. That should me "also"?

A. "Also."

Q. Have you not stated here before that the actual expenditures for the twelve months for depreciation ending October 31, 1905, was $194,666.87, instead of being the $1,114.236.38 given by you in Exhibit 93?

A. Instead of being not only that, but also including the $51,-532.36, itemized under the station expenses in the same Exhibit, No. 93.

By Mr. MATHEWSON:

Q. Have you ever testified that the $1,114,236.38 was all actual expenditure?

A. I never have so testified, because I knew that it was not.

By Mr. BURR:

Q. Is the difference between $194,666.87 and the $1,114,216.38 made up by adding the estimated amount to a fixed amount?

A. No, that is not the process by which that amount is arrived at at all. It is not the addition of a fixed amount to an estimated amount, excepting as the two months of this statement include actual replacements and ten months estimated replacements and other contingent expenses, calculated at ten cents per thousand cubic feet sold.

By Mr. BURR:

Q. Mr. Carter, look at page 1183 of the printed case before the Gas Commission and see whether the statement made by you and appearing there refreshes your memory in connection with
794 this item I am now speaking of, and if so, and that is a correct statement you may read it, using the number of the present Exhibit 93.

The WITNESS: This statement is correct and I will read it into the present evidence, Mr. Burr:

The item of $1,114,236.38, appearing in Exhibit No. 144, following the heading "Contingent Expense and Depreciation," is made up as follows: For November and December, 1904, that proportion of the replacement expenditure of $456,000 representing depreciation in distribution plant, amounted to $35,990.11. The estimated depreciation and contingent for 10 months ending October 31, 1905, estimated at 10 cents per thousand cubic feet sold, amounted to $1,078,246.27. The total of these two items appears in the summary of operations for the nominal year as $1,114,236.38. An additional item appearing as replacement at works for the months of November and December, 1904, and shown separately in the summary of operations for the nominal year ending October 31, 1905, amounts to $51,532.36.

The total of replacements in distribution plant and at works for the months of November and December, 1904, amounted to $87,522.47. The replacement in works and distribution plant actually occurring during the ten months ending October 31, 1905, amounted to $107,144.40, making a total of actual replacements during the nominal year ending October 31, 1905, of $194,666.87. The amount of $456,335.79 for replacement account for the year 1904 applicable to November and December, 1904, is $87,522.47 as appears by the second page of Exhibit No. 159.

795 This sum appears in Exhibit No. 144 as follows: $51,532.36 in the column following the heading "Depreciation." The balance of said sum of $87,522.47, to wit, 35,990.11, is part of the item in Exhibit No. 144 (Exhibit 93 in the present case), amounting to $1,114,236.38, following the heading, "Contingent Expense and Depreciation." The balance of said item, $1,114,236.38, after deducting said $35,990.11, to wit, $1,078,246.27, represents the amount charged on the company's books for normal depreciation accrued, but not paid—abnormal depreciation and contingencies.

Q. I notice, by the way, before I go further that in one of these exhibits you speak of Contingent Expenses and Depreciation. That is in Exhibit 93, and in Exhibit 94 you speak of it as "Contingent Expenses, Including Renewals" or includes renewals. Do both items mean the same?

A. Yes; although in the case of Exhibit 93, that method of designating that item is intended to indicate that it covers that depreciation item for the two months of 1904 during which there were no contingent expenses.

By Mr. MATHEWSON:

Q. During which period the ten cent charge was not made?
A. Yes.

Mr. MATHEWSON: That is the ground of the distinction.

Mr. BURR: Is this the item which I understood you to say some time ago was not charged and did not appear upon the books of the company prior to May, 1904?

A. Prior to May, 1905, Mr. Burr.

796 Q. This is the item regarding which your company held a conference——

A. What item do you refer to now, Mr. Burr? Assuming I understand you when you say prior to May, 1905, may I be told what item you refer to?

Q. The item writing off a certain amount for depreciation.

Mr. MATHEWSON: The ten cents written off.

Mr. BURR: Yes.

The WITNESS: I cannot say generally.

Q. I am referring to the ten cents you charge up against one thousand cubic feet, yes.

A. Yes, the first item was made in May, 1905.

By Mr. MATHEWSON:

Q. Wasn't it made as covering from January 1, 1905——

A. It was, as I plainly testified before. Mr. Burr asked the date.

Mr. BURR: Now, here is another large item which appears on Exhibit 93, $1,693,646.16, and it appears on Exhibit 94 as $1,769,968.42.

A. Yes, sir.

Q. The item on Exhibit 94 I take it means the extra amount charged for oil during the month- of November and December, 1905, over and above the amount stated in Exhibit 93?

A. That is the case, over the corresponding month in 1904.

Q. No, I didn't mean that, it shows the difference between the amount spent for this item, October 31 to the last of the year.

A. No, it would not mean that because they are both statements covering a year.

Q. I am speaking now of the difference between the two statements. The item of $1,693,646.16 which appears as a charge for gas oil in Exhibit 93 being a charge for that commodity for

797 the ten months ending October 31, 1905, doesn't it?

A. No, it does not.

The MASTER: For the theoretical year.

Mr. BURR: For the nominal year.

A. Yes.

Q. As appears by Exhibit 93.

A. That is the case.

Q. To what time is the difference to be charged?

A. To what time?

Q. Yes. What period is the difference between the $1,693,646.16, which appears on Exhibit 93, and the $1,769,968.42 appearing on Exhibit 94?

A. I don't quite understand the question, Mr. Burr.

Q. Exhibit 93 is the summary of the operations for the nominal year ending October 31, 1905, on which appears the charge gas oil, $1,693,646.16. In Exhibit 94, for the calendar year 1905, the charge against that same item appears to be $1,769,968.42. Between what period was the difference between those two items incurred as a charge against this item gas oil?

A. Well, there are two things that contribute to that variation, according to the statements themselves, Mr. Burr. During the calendar year 1905 we used more oil and we used it at higher average cost per gallon than we did during the nominal year ending October 31, 1905; and it is due to the fact that we used a larger quantity of oil and paid a higher price for it during the calendar than during the nominal year, that there is that variation in the cost.

Q. That is what I wanted to find out. You had to pay more during the nominal year 1905 than you did during the calendar year 1905?

A. The average cost of the oil used during the calendar year exceeded the cost of the oil used during the nominal year.

798 By Mr. PAGE:

Q. It is just the opposite, isn't it?

A. No, that is not the case. During the nominal year the average cost of oil per gallon was 4 and 8/100 per cent., while during the calendar year the average cost per gallon of oil was 4 and 23/100 per cent.; not only that, but the quantity was greater during the calendar year than during the nominal year, that is, we used 41,876,670 gallons during the calendar year against 41,504,907 gallons during the nominal year. Both things contributing to the variation of the cost in oil during that period.

By Mr. MATHEWSON:

Q. In other words the 22 candle-power law went into effect July 1, 1905, so that the nominal year ending October 31, 1905, had only four months or one-third of its term, while the calendar year had six months or ½ of its term under the 22 candle power requirement. Is that right?

A. That is right with regard to the candle-power.

By Mr. GANS:

Q. Will that explain the increase in the cost of the price of oil charged you by the Standard Oil Company?

A. No.

Mr. MATHEWSON: No, we had to use higher grade oil.

By Mr. BURR:

Q. That didn't occur to you before, did it, Mr. Carter?

A. I knew that before.

Q. You said some time ago that we might have these oil contracts. Can we see them if we want them?

A. I don't know of any reason why you should not.

Q. And you were also, if I remember rightly, to look up
799 the item of rebates, if any existed in either the coal or oil?

A. Yes, there are no records of any.

Q. None of either?

A. Applying to this year?

Q. Yes, applying to this year.

A. None of any kind.
Q. I am speaking of the year 1905——
A. Or the nominal year.
Q. Or the year before.
A. Nothing.
Mr. MATHEWSON: Mr. Carter said if there were any they would appear on the face of the contracts.
The WITNESS: The only one I have any recollection of is one containing a small rebate.
Q. You did testify to some rebates before the Gas Commission, didn't you, coal or oil?
A. Coal, I think I did, and I think it is a matter of record on the contract, also when that was purchased.
Q. If there are any rebates they would appear in the contracts themselves?
A. Yes, absolutely.
Mr. MATHEWSON: Mr. Carter also testified you may remember, Mr. Burr, that in making up the cost of gas if any rebates were allowed they were deducted and that it was only the net cost of coal, not the gross charge which was included.
The WITNESS: That was the case.
Q. Then the items that go to make up this large sum you have supplied in another exhibit do I understand you to say, the one you have just read from, that is showing the number of gallons of oil consumed within the period to which these figures refer?
A. I don't know what you are referring to, Mr. Burr.
The MASTER: The number of gallons of oil is shown by this exhibit.
800 A. The number of gallons of oil is a matter of record on Exhibits 93 and 94.

By Mr. GANS:

Q. The totals are as they are on the exhibits put in yesterday, aren't they?

By Mr. BURR:

Q. You have a statement I suppose showing the amount of oil consumed by each station?
A. Yes, I can furnish a statement showing the number of gallons of oil used by each station if you desire it.
Q. We find another large item, Mr. Carter, "General Office Expenses," Exhibit 93, $276,823.22, and the same item in Exhibit 94 is stated to be $339,999.51. Will you explain the difference between those two amounts as they appear in these two exhibits?
A. Well, I would have to analyze the accounts to do that, and I would be very glad to do that if you wish.
Q. If you are going to give us that statement, Mr. Carter, will you give us an itemized statement of the items of which it is made up?

A.—

General Expenses	$19,872.42
Engineering Department	28,212.95
Incidentals	67,844.31
New Business	60,575.28
And Claims for Damages	30,838.00

Now your request is what, Mr. Burr?

Q. Give us an itemized statement of that?

A. Corresponding with that?

Q. Yes.

A. I will.

Mr. MATHEWSON: Do you mean to have him repeat that which he has just read off?

Mr. BURR: No, the items.

801 Mr. MATHEWSON: Singly item by item all the way through?

Mr. BURR: Yes.

Mr. MATHEWSON: I thought your accountant went up to check them over?

Mr. BURR: It was understood when we started to-day that this request might be unnecessary in view of what information you had supplied Mr. Heyward.

Mr. MATHEWSON: I understood Mr. Heyward went up for the purpose to see what the expenses were and what the classes were. Of course we will produce the books.

Q. Now Mr. Carter——

A. My understanding was that all these items were to be checked at the office by the accountant for the City and for the State, and every facility will constantly be afforded them to check these figures, and has been afforded them, and if they have not completed their work yet that is no fault of ours.

Q. If it is unnecessary to make out a statement in detail, for it would be a long matter, you have no objection to Mr. Heyward verifying these items?

A. Not at all. Every facility we could afford Mr. Heyward has been offered him and will continue to be offered him to check these figures in as great detail as he desires.

Mr. PAGE: That applies also to the accountant for the State?

The WITNESS: Yes, decidedly, and they are availing themselves of it; there was a man there with assistants this morning going over elaborately all the details of the accounts, very thoroughly.

Mr. BURR: I have not yet received the report from Mr.

802 Heyward, nor have I heard that Senator Page got a report from his accountant. I have only had a chance to speak to Mr. Heyward just now. I hope that matter will be satisfactorily arranged and no necessity arise for requiring this detailed account.

Q. You have referred to serious accidents, and explosions as a contingency——

Mr. MATHEWSON: I would merely say to the Master so that there

may not be any mistake about it, that I do not think we ought to be asked to prepare a detailed statement of every single item of that kind. I think rather than do that we would produce the books. It would be utterly useless to go to that trouble.

The MASTER: I suppose the accountants can do it so far as to satisfy themselves.

Mr. BURR: I think they can get all the necessary information if both sides exercise good temper about it.

Q. Now, can you furnish me a chronological statement of the accidents which have occurred to the Consolidated Gas Company; also with the cause of each accident, and a statement of every catastrophe——

Mr. MATHEWSON: I shall certainly object to any such thing as that and shall not direct the witness to produce or permit him to produce it, unless he is directed to do so by the Master. Here is a charge in 1905, for damages of over $30,000 as just read. You know what the nature of these cases *case* was, Senator. You cannot call upon us to go back to 1884——

The MASTER: Is it your idea that this item there in any
803 way estimates what they actually paid out, showing what they had paid out for the year 1905?

Mr. BURR: I understand it that they made a charge of so much a thousand cubic feet, for something that had occurred heretofore; in other words, accidents and explosions occurring in the past, and which might occur in the future.

Mr. MATHEWSON: It means that this charge of thirty and some odd thousand dollars, that the ten cents is to meet possible experiences in the future like the one which occurred to the Boston Gas Light Company, which I think cost them ten cents a thousand feet per year for seven years and compelled them to suspend dividends. They got the subway earlier than we and they lost ten cents a thousand feet a year by doing it. This is for the future and not for the past, and our removal to Astoria——

Mr. BURR: Very well, Mr. Mathewson, I think your statement made before the Gas Commission is enlightening. What we do claim is this, that in fixing our charge for gas you must consider that we are entitled to a fair reserve over and above that, to meet contingencies and accidents in the mains, and we think that this is a fair figure. Now I am asking a little detail in regard to that point, what this arbitrary figure of ten cents a thousand cubic feet is based on. And why not make it 20 cents or 15 cents.

Mr. MATHEWSON: We never have had such accidents. We had no claim in connection with the subways here, but their building has increased the danger from that source very greatly, and it is evident by the experience of the Boston Company, where they had an explosion; and in view of our removal to Astoria, we are enti-
804 tled to a contingent charge beyond that actually charged. It is to provide against this danger that this charge is made. And if you should have a statement as to what had occurred in any previous year it would not be illuminating upon any statements we

have made before the Commissioner. All that was made perfectly clear to the Gas Commission.

Mr. GANS: Why not make it perfectly clear here?

Mr. MATHEWSON: I think I have.

The MASTER: The question is objected to and if the witness can answer it I will let him answer it. Insofar as it involved going into the record and getting a statement of all the accident cases in the last 20 years, I am not going to require him to do it; and if you want it you will have to subpœna their books and put this in. It doesn't seem to me that it is beyond the inquiry perhaps what might have taken place in the last year or two, that is germane as cross-examination of anything in this statement in view of what Mr. Mathewson says.

Mr. GANS: I suppose it may be taken with the concession that they never had any experience on which to base such a charge.

Mr. BURR: I think the mind of the court should be fully informed upon this quite large item of ten cents which is charged up against each ten thousand cubic feet of gas by reason of this contingency, and I think we are entitled to get all the information we possibly can about the history of the gas company and what accidents or misfortunes or inherent dangers there are so far as they can be demonstrated from the actual things which have occurred in the gas business in the city of New York.

805 Q. So I understand you will not prepare that statement. If I want to go further into it, I will have to produce the books.

The MASTER: I said I would not allow the question insofar as it seemed to involve the witness preparing a statement or having one prepared for you. Under the previous agreements as to cross-examination I don't think your request is reasonable.

Mr. BURR: I don't want to be unreasonable in any request I make here.

Q. Is there any special book which you keep in which these matters I have just referred to are specially kept?

A. No, Mr. Burr, no book of that kind that I have any knowledge of.

Q. Are you insured against accidents?

A. Certain kinds, yes.

Q. What kinds?

A. Well, against accidents to employees, not against accidents to the public or general damage, particularly of the kind referred to by Mr. Mathewson as having occurred in Boston; not insured against anything of that nature, but against accidents to employees while in the performance of their duties. We have that insurance.

Q. Are you quite positive about that or would you need to refresh your recollection?

A. I am quite positive.

Q. You have no insurance to safeguard you against losses by explosion?

Mr. MATHEWSON: The public?

Mr. BURR: Yes.

The WITNESS: No.

Q. I see, Mr. Carter, on Exhibit 93, insurance is $55,525.90, making a charge against each thousand cubic feet of 42/100 cents.
806 What does that represent?

A. The cost of carrying insurance against fire, against accidents to employees, boiler insurance, and expenses of that nature.

Q. I suppose you could let us look at the policies, couldn't you?

A. I suppose so, yes, sir; I am willing to do so.

Q. Will you produce the policies at the next hearing, Mr. Carter?

Mr. MATHEWSON: Yes, we will if you desire. Don't you think you can check them up there better than to have us bring them down here.

Q. Are there many policies?

A. Yes, sir, quite some.

Q. At one per cent. that would represent an insurance of over five million dollars, wouldn't it?

A. At one per cent., yes, it would.

Mr. MATHEWSON: You can't get a gas plant insured at one per cent.

Q. I notice a very wide difference between the item which appears in Exhibit 93, Advertising and Legal, $62,861.02, being a charge against the thousand cubic feet of 47/100, and as it appears in Exhibit 94, the same item, Advertising and Legal is given at $105,800.02, and the charge against the thousand cubic feet is at the rate of 81/100 cents?

A. The variation in the amount of the item I think is due to the fact that at the end of the year we charged all legal expenses into the legal expense account which is entitled in that item up to that time. For the purpose of having it segregated and convenient for reference it was carried to Incidental Expenses; that is, if my recollection is correct, among the General Office Expenses. At the end of the year it was closed out of that account and put into the Legal Expense Account and formed a part of this item appearing in the calen-
807 dar year's statement. In the nominal year's statement the same expense was shown in bulk and was divided between legal expenses as to some of the legal expenses and Incidental General Office Expenses, to other legal expenses.

Q. Then the difference between the amount given in Exhibit 93 of $62,861.02, and the amount given in Exhibit 94, of $105,800.02 arose between the nominal year ending October 31, 1905, and the calendar year ending December 31st, 1905, didn't it?

A. No, I am trying to make it clear that it was on the nominal year that it appears, not the calendar year, but the nominal year. It was not until the end of the year that we closed legal expenses into one account; consequently the calendar year statement shows all the legal expenses in one item, whereas in the nominal year it was divided into two items.

Q. What do you mean by calendar year and nominal year?

A. Simply in making this statement that these two accounts happened to have been combined.

Q. You can show absolutely what you pay for advertising?

A. Absolutely.

Q. You spoke a moment ago in regard to insurance of the employees. Is that referred to here in your item "Gas Company's Mutual Aid Society," for which a charge of $6,413.99 is made in Exhibit 94, a charge against 1,000 cubic feet of gas sold, of 5-100ths of a cent? Is that item embraced in the insurance that you refer to?

A. No.

Q. What is that?

A. That is simply a contribution to a benefit fund of the employees belonging to it, made by the company as a matter of policy.

Q. And yet, that charitable disposition you charge against the cost of gas, do you?

A. Well, I am not sure that it is all unadulterated charity.
808 I am inclined to think that there are other considerations that enter into the making of that contribution. We employ a great many people and we believe that the interest on the company's part that is expressed in that way is a very profitable investment of the amount involved.

By Mr. MATHEWSON:

Q. From a business standpoint?

A. From a business standpoint, a purely business standpoint.

Mr. BURR: Won't you kindly let this witness testify himself, Mr. Mathewson?

Mr. MATHEWSON: I have asked him whether that is so.

Mr. BURR: He is experienced enough to know whether it is a profitable investment from a business standpoint, without any suggestion.

The WITNESS: My impression about it is that it is an extremely profitable investment from a business standpoint.

Mr. BURR: I know you always fall into the same way of thinking as Mr. Mathewson. I would prefer that you do not suggest to him, Mr. Mathewson.

Mr. MATHEWSON: You will find that it was all gone into. And it was perfectly satisfactory.

By Mr. BURR:

Q. In Exhibit 93 the item appears "Contributions to Employees' Aid Society, $6,392.21." In Exhibit 94 the item appears "Gas Company's Mutual Aid Society, $6,413.99." That is the same item?

A. Identically the same item. They have slightly varied
809 the title, but it is the same account.

Q. Do you make Christmas presents to the employees?

A. No, sir.

Q. This is the only contribution that you make to the employees for which this charge is made?

A. That is the only contribution, yes, sir.

Q. But you do look after them when they get a little old or superannuated?

A. We have an account that is called "Superannuation" there, the next item to the contribution to Mutual Aid Society, which represents the amount paid to superannuated employees, and I would say practically the same thing with respect to that disbursement as with respect to the contribution to the Mutual Aid Society, the Employees' Aid Fund.

Q. The item for "Superannuation" appears on Exhibit 93 as $14,803.57 and is a charge against 1,000 cubic feet of gas sold, of 11-100ths of a cent?

A. Yes.

Q. In Exhibit No. 94 the same item appears, $14,943.86, also a charge against 1,000 cubic feet of gas sold, of 11-100ths of a cent. Those figures are right?

A. That is the case, yes.

Q. Now, in what way is that total arrived at?

A. That is the total amount expended or disbursed in that way, charged to that account as the payment is made.

Q. I mean in what way do you arrive at the expenditure? Have you a system by which a man arriving at a certain age, who has been in your employ during a certain number of years, is retired or pensioned?

A. Yes, we have. We have a rule that governs the item of "Superannuation," and the amount.

Q. And if he is maimed, does he get a pension?

A. Yes, there are cases of that kind included.

810 Q. Well, is that pension included in this superannuation?

A. Yes.

Q. Well, have you an insurance for the employee to protect him against loss through bodily injuries?

A. Insurance to protect the company against loss.

Q. To protect the company against any claim of the employee?

A. Against claims.

Q. For bodily injuries received while in your employ?

A. Precisely so, and I have in mind more than one case where the question was so finely drawn as to the responsibility, whether on the part of the employee or on the part of the company, that the company would be forced into the position by the insurance companies of defending itself against a claim which it really considered was a perfectly good and fair one, and where from a business standpoint it would be extremely bad policy for the company to fight the case. In cases of that sort, one or two that I have in mind, the employee has been placed upon this superannuation roll and received an allowance.

Q. But you go still further than that superannuation charge, as I have already stated, against the cost of gas at the rate of 11-100ths of a cent; you go still further and have an item here "Vacation and Sickness," which appears in Exhibit 93 as $7,995.41, a charge against the price of 1,000 cubic feet sold at 6-100ths of a cent; it appears in Exhibit 94 as $8,175.20 against the price of 1,000 cubic

feet of gas sold, at 6-100ths of a cent. What does that item mean, exactly?

A. Well, the title practically describes exactly what it is. I might elaborate it, however, and say that it is principally payments made to employees who are sick, instead of charging their wages to the particular operating account where it would be charged if they were at work, thereby, from the standpoint of careful scrutiny of the account, as to efficiency in this particular department, leaving
811 an entirely false impression as to the cost of operating that department. The charge is made against an account of this kind so that the charge in the particular operating account only bears the cost of labor actually performed, whereas the pay of the man while he may be sick, or for some reason allowed a leave of absence, is put into this account to eliminate from the operating account everything that does not absolutely represent labor.

Q. Yes, but the point is; from these Exhibits Nos. 93 and 94 it would appear that these expenditures which are made for philanthropic or political reasons——

Mr. MATHEWSON: Strike out "political reasons."

Mr. BURR: He said "matters of policy," as I understand it.

Mr. MATHEWSON: But I do not think you mean political, do you?

Q. (Continuing:) Did you not say it was a matter of policy, to make this payment?

A. Yes.

Q. Then I say that those expenditures which you make as matters of policy or philanthropy, vacations or sickness, superannuation, and your contributions to the gas company's mutual aid society, are all charged up against the cost of a thousand cubic feet of gas and are not taken out of the profits of the company or out of the pockets of the stockholders?

A. They most decidedly are taken out of the profits of the company and out of the pockets of the stockholders.

Q. In that way, by charging it against a thousand cubic feet of gas; is not that so?

A. No, a thousand cubic feet of gas is a rate that is arrived at by using the total expenses and the total output of gas, and
812 this is considered one of the item- of expense, and as such operates to diminish the profit from the sale of gas at any given rate.

Q. Is the item for superannuation increased from year to year or diminished?

A. I do not think it changes much from year to year.

Q. Do you know, roughly speaking, the number of employees engaged in the work of the Consolidated Gas Company?

A. The number of employees altogether?

Q. Yes.

A. All departments?

Q. Yes; I mean roughly speaking. Is it 7,000 or 8,000 men, about?

A. I would not like to attempt to give the number from memory.

I can inform you exactly of the number of men employed at any given time if you will name, if you will furnish me with the date.

Q. Now, I understand that you pay those companies that supply you with gas, or from whom you purchase gas, under the contract which has been offered in evidence, ten cents over and above the cost of production?

Mr. MATHEWSON: No, ten per cent.

The WITNESS: Ten per cent.

Mr. MATHEWSON: Ten per cent. on the cost of material and labor.

Q. Do you know whether those items of Superannuation, Gas Company's Mutual Aid Society, Vacations and Sickness, etc., enter into their accounts in making up their statements?

A. I am sure they do not.

Q. So that this is a unique expenditure with you, a charge against one thousand cubic feet of gas, is it?

A. No, if those companies have such expense—and I have
813 no doubt that all of them may have it more or less in some form or other—it would not enter into the cost of manufacturing gas any more than it does into this statement of ours. We do not include it in our cost of producing gas, and they do not include it in the cost of gas which they manufacture for us. If it appears among their expenses at all it would appear as it does in our own exhibit, among the distributing expenses.

Q. By the way, that reminds me; how do you verify their accounts when they are rendered to you? How do you see that they only charge you in accordance with the terms of the contract?

A. Why, we have access to their books of account and records. In that way we are able to establish it at any time, both with respect to the quantity and with respect to the cost to them, of the gas manufactured for us.

Q. They render you monthly statements?

A. Yes.

Q. And those statements are always subject to your verification from their own books?

A. Yes.

Q. And you do verify them?

A. Yes.

Q. And you have the statements?

A. Yes.

Q. The item of labor is on record here as being a very large item, in making up the actual cost of production of gas, is it not, and distribution of gas?

A. I am not aware of its being on record as being a very large item, and that is another elastic term; it may be a question of opinion as to whether it was very large or very small, in proportion to the gas that we manufacture.

Q. But that labor and material make up a greater amount in the cost of a thousand cubic feet of gas than any other item that you can think of, don't they?

A. Kindly refer to the exhibit, so that I may know just what you are referring to.

Q. I want to know—is it not true that the cost of labor and
814 the cost of material enter more prominently into the cost of the production and distribution of a thousand feet of gas than any other item or items?

A. Yes, indeed; there isn't much else except taxes and contingent expenses and bond interest and things of that sort.

Q. Have you ever figured up just what percentage the cost of labor and material does make in the cost of a thousand cubic feet of gas?

A. No.

Q. I did not know but that you would be able to state it offhand.

Mr. MATHEWSON: Each item appears on these statements before you. I suppose it would be simple to add them up.

Q. Now, that labor account is made up from the pay rolls, is it?

A. Yes.

Q. And those pay rolls, I think, you have testified, are supplied or sent to you at the main office from the stations?

A. Are you referring to some particular item of labor? We have labor distributed over all our accounts, and we have labor that does not appear on the pay rolls of the stations, a great deal of it.

Q. I suppose you refer to the labor on the mains, and on the pipes?

A. Yes.

Q. You do not call that skilled labor, do you?

A. Some of it is skilled, yes.

Q. What part of it?

A. We consider caulkers more or less skilled labor.

Q. What other kind of labor is used in putting down mains besides caulkers?

A. The man who superintends the job would have to be more or less skilled.

Q. What does he know; is he an inspector?

A. No, he is a foreman.

Q. What other kind of labor is there used?

A. In the street department are you referring to particularly?

815 & 816 Q. Yes.

A. How skilled they have to be I would not like to testify.

Q. I wanted to know from your own general observation. Does the rate of wages fluctuate, the rate paid. For instance, there is a caulker; now, he is a skilled laborer, is he not. His rate of wages is fixed, is it not?

Mr. MATHEWSON: By his union.

Q. I mean to say, is there a recognized price for such labor as a caulker? I am free to confess that I do not know.

Mr. MATHEWSON: Mr. Simpson knows all about that. He will doubtless be here so that you can ask him about that and he will know all about it, I am sure. He testified, you know, that labor has increased since 1885 about 25 per cent., I think it was. Now, in

laying mains there is considerable machinery used, which requires a higher character of labor than when it was all done by hand, digging ditches and lugging the pipe on their shoulders.

At 5:25 P. M. adjourned to to-morrow, August 16, 1906, at 1:30 o'clock P. M.

Last Exhibits:

Complainant's, 100.
City's, 7.
State's, N.

817 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, THURSDAY, *August* 16, 1906—1:30 o'clock p. m.

Met pursuant to adjournment.
Present: The Master, Mr. Mathewson, Mr. Page, Mr. Gans, Mr. Burr.

818 ROBERT A. CARTER resumed.

Cross-examination continued by Mr. BURR:

Q. Is it not a fact that the only gas companies operating in the Boroughs of Manhattan and the Bronx are the Consolidated Gas Company of New York, the New York Mutual Gas Light Company, The Standard Gas Light Company, The Central Union Gas Company and the Northern Union Gas Company?

A. Did you mention the New Amsterdam Gas Company? If you did not, it is operating in New York; also the Bronx Gas and Electric Company, which is in the Bronx.

Q. And the only electric companies doing business in the Boroughs of Manhattan and the Bronx are the New York Edison Company, The United Electric Light and Power Company, The Brush Electric Illuminating Company; is there any other company?

A. No, those are the only ones that I know of.

Q. And the only gas and electric companies operating in the Boroughs of Manhattan and the Bronx are the Westchester Lighting Company and the Bronx Gas and Electric Company?

A. That is the case, to the best of my belief and knowledge.

Mr. MATHEWSON: The Bronx Gas and Electric Company is a gas company; not an electric company alone.

Q. I am correct in the statement I have made as to the electric light companies, am I not?

A. Yes.

Q. The New York Edison Company, The United Electric Light and Power Company, The Brush Electric Illuminating Company; those are the only electric light companies operating in the Boroughs of Manhattan and the Bronx?

819 A. No, they are not. The Bronx Gas and Electric Company operates in the Bronx, and the Westchester Lighting Company perhaps has a few customers in the Bronx.

Q. Well, those are all the companies that are operating as gas or as gas and electric light companies or as electric light companies in the Boroughs of Manhattan and the Bronx?

A. The only ones I know of.

Q. The Consolidated Telegraph & Electric Subway Company and the Empire City Subway Company are engaged in the business of providing and maintaining conduits for electrical conductors in the Boroughs of Manhattan and the Bronx, are they not?

A. I am so informed. I have no other than hearsay information.

Q. Has the Consolidated Gas Company any interest in the Consolidated Telegraph & Electric Subway Company or the Empire City Subway Company?

A. Well, not directly that I am aware of.

Q. Well, have they through any of the companies that they control?

A. I think that some of the capital stock of the Consolidated Telegraph & Electric Subway Company is owned by the New York Edison Company.

Q. Can you say how much?

A. I cannot.

Q. And do you know whether any of the companies controlled by the Consolidated Gas Company has any interest in the Empire City Subway Company?

A. No, I don't know. I think possibly the Edison Company may hold some stock in the Empire City Subway Company.

Q. Does the Consolidated Gas Company receive any interest on the loans or advances made by it to the Astoria Light, Heat & Power Company?

A. No, it does not.

Q. I understood you to say the other day that there were
820 certain notes that had been discounted—notes of the Consolidated Gas Company discounted by a bank in the city here, the proceeds of which notes you believed were used in the construction work of the Astoria Light, Heat & Power Company; is that the fact?

A. I think I stated in reference to certain bills payable showing on our balance sheet of December 31st, 1903, that they represented notes given to the City Bank for money advanced. I was asked

what that money was required for. I said I didn't know, but I thought at least a part of it had been employed in the Astoria construction.

Q. Well, haven't you found out about that, whether that is a fact or not?

A. No, I have not. I haven't had time to do so, and I can't recall that I was to find that out.

Q. Yes, you were distinctly asked, Mr. Carter——

A. I don't know that it would be possible for me to find it out.

Q. (Continuing:) To give us a statement as to the dates of those notes and also what the notes were given for?

A. Oh, the dates of the notes? That I know. The notes were issued in March, 1903. They were issued for the purpose of procuring cash for our bank balance. Now, just exactly what that particular cash was employed for it would be impossible for me to say. It went into the general fund and was employed for general purposes, and I can only assume that some of it was used in connection with the Astoria construction, probably half of it or more.

By Mr. MATHEWSON:

Q. Some part of your general funds were advanced to the Astoria Company?

A. Yes, they were at that time.

821 By Mr. BURR:

Q. You said at the hearing on August 13, referring to the proceeds of these notes, that some of it was used for Astoria construction possibly?

A. Yes.

Q. Do you wish to qualify that statement?

A. No. I just repeated it.

Q. Now, these notes were discounted by the Bank?

A. Well, I don't know as you call it discounted. We borrowed some money and gave notes for it. I thought the term discounting was not usually employed in connection with a transaction of that sort.

Q. Well, you paid interest on those notes, did you not?

A. Yes, sir.

Q. How much interest?

A. We paid 3¼ per cent., as testified at that time.

Q. In Exhibit No. 94 there is an item of "gas made at the Consolidated Company's station, 10,657,810,000; gas made at other company's stations under agency agreements, 2,929,210,322; gas sold—made at Consolidated Company's stations, 10,419,461,426; other companies stations, under agency agreements, 2,863,702,341;" the gas sales, total, 13,283,163,767, and the contingent expense on the same statement is stated at $1,328,316.37. That is based, as you explained yesterday, on the total number of cubic feet of gas sales?

A. Yes, sir.

Q. And that contingent expense then is based upon the gas manufactured by you and the gas purchased by you?

A. It is not based upon either. It is based upon the sales, Mr. Burr.

Q. Which embrace both.

A. Of course.

Q. Well, upon what theory did you charge that as against the sales of gas purchased?

A. Well, I can only venture the opinion that it is on the basis or upon the theory that our arrangement for the manufacturing of gas for us by other companies is merely a temporary one that we
822 hope to be able to terminate very soon, so that we would not make any variation in that rate, recognizing a condition that is, as I say, a temporary one.

Q. By temporary do you mean until the Astoria gas plant is completed?

A. We expect to manufacture all the gas that we sell when we have the Astoria plant operating.

Q. You heard the testimony of Mr. Bradley that he expected that event to occur in from 15 to 25 years.

Mr. MATHEWSON: Oh, no. He said he expected the first unit to be in operation this fall, and the first unit has a capacity of four billion feet per annum. Our sales of gas manufactured for us are now about three billion feet per annum, so the first unit would take care of all that is manufactured for us by other companies, with quite a margin over. Is that correct, Mr. Carter?

Mr. CARTER: Yes, sir. That is correct.

Q. How was this ten cents per thousand contingent fixed upon. That is, I would like to have the basis in figures upon which it was calculated?

A. I am not able to give you any, Mr. Burr, in figures, other than the ten cents per thousand. I have explained several times what it is intended to provide for and that we think that that amount is adequate, although originally we thought it would not be—we calculated first that thirteen cents would be necessary to provide a sufficient reserve to take care of such contingencies as are likely to arise in our line of business.

Q. Does that embrace contingencies regarding the mains?

A. It would take into account such contingencies regarding
823 the mains as electrolysis, more particularly, which threatens to be a source of very considerable expense to us in the way of renewals of mains which are more or less seriously affected by electrolysis.

Q. That is the only item that would enter into this contingent fund regarding the mains?

A. Oh, no, it is not. The contingent fund would also provide for the cost of such replacements and such renewals as are occurring more or less all the time where we substitute a large main for a small one in the street where the growth of the business has renderd a larger main necessary.

Q. Mr. Simpson has testified that the mains that were laid forty or fifty years ago were in perfect condition to-day and Mr. Bradley on being asked what the life of a main was practically said that the

main was immortal, and the testimony here is that the mains are in perfect condition?

A. Well, as I have said, we are threatened with the action of the electric currents in the sub-soil upon our mains. That is one thing we intended covering by this reserve fund. And then we have constantly the replacement of old mains of a small size with new mains, in the nature of supersession. That is not because of any depreciation in the old main but simply to provide additional capacity where it is required and where the small main at present in the street is not adequate for the demand.

Q. Don't you make an allowance for that in your charge for replacement?

A. The item of replacement and all our replacement is supposed to be covered by this ten cents.

By Mr. MATHEWSON:

Q. Is it not the fact that all our replacements both in the manufacturing and distributing system are included in this ten cents?

A. They are, yes, sir.

Q. And are intended to be?

A. Oh, yes, sir.

824 By Mr. Burr:

Q. Have any serious accidents occurred to the works of the Consolidated Gas Company involving large sums of money in damages since 1884?

A. Yes, there has been one serious accident. I do not know that I could say just how great a loss was involved by it because I don't think it has yet been settled whether the loss is one to be borne by the company or borne by the contractor, and that was the case of an explosion in one of the holders — the 21st Street Station, by which the holder then under construction and nearly completed was completely demolished as well as adjoining property, and the company's property damaged to a very considerable extent.

Q. Was that at 14th Street?

A. At 21st Street. I should say that the total amount involved in that accident, taking into account the amount of money expended on the holder in the course of construction, and other losses and damage suits of various kinds would run from four hundred thousand to five hundred thousand dollars, although I am really making a "stab" at it, because I haven't had occasion to canvass that subject for that information for several years.

Q. Well, is that question in litigation?

A. Yes, sir, it is.

Q. And the company claims that it is not responsible, but that the contractor is?

A. It makes that claim, yes, sir.

Q. And the Contingent Account in Exhibits 93 and 94, aggregating over one million dollars, is that a transcript into your books of actual vouchers, or merely an estimate?

A. Well, we canvassed the 1905 nominal year item very thor-

oughly yesterday and I would say with respect to that that actual vouchers enter into the item for actual replacements and re-
825 newals for two months of 1904, which are included in that nominal year. Now, with respect to the operation for the calendar year of 1905, the amount is calculated at ten cents per thousand cubic feet sold, and as I have said, it is intended to cover among other things the actual cost of renewals and replacements made during that year.

Mr. MATHEWSON: Mr. Burr asked whether that is carried into the books, this ten cents?

The WITNESS: It is carried in the books not by any voucher but through a journal entry in which is set forth the quantity of gas sold during the month and the amount calculated at ten cents per thousand cubic feet sold.

Q. There are three items of expenses on Exhibit 94, also on Exhibit 93, and in Exhibit 93 expense is given at $62,441.83. Does that refer to the expense at stations? I see just above the word "Expense" the words "repairs (at stations)." Does the expense just below refer to expense at stations?

A. At the station offices, and, at the stations, I might say, because it would include in the winter time the shoveling of snow from the roofs of the station buildings and the clearing away of snow from around the entire plant and that sort of thing, and so I don't think I would care to limit it to office expenses. It is the expense at the stations.

Q. It is made up then of the office expenses and the other general incidental expenses at the stations?

A. Yes, the other general incidental expenses at the stations.

Q. What is that item made up from, reports from the stations?

A. Oh, no, that is made up, so far as labor is concerned, from the pay roll, and so far as supplies are concerned, that would be
826 included in that item of expense are obtained from vouchers representing the purchase of them.

Q. Would that item embrace repairs at the station?

A. Oh, no, repairs at the stations are separately accounted for and are shown in the three items proceding that item in Exhibit No. 93.

Q. So there is nothing but the salary and the shoveling of snow and general work around the stations of a minor character?

A. Of a minor character. Stationery and printing and office supplies and that sort of expense—salaries of the clerks, the bookkeepers.

Q. I suppose that is shown in an account of the five stations?

A. Yes, sir.

Q. And in what book would that appear?

A. In the operating ledger, and my impression is that the amount chargeable to each station is in the testimony and was read out of a book here the other day when the operating ledger was produced.

Q. And this other item of expense, $583,278.52, what particular expense does that refer to in Exhibit 93?

A. That is the branch office expense.

Q. How many branch offices have you?

A. We have four branch offices.

Q. Do you own the property upon which those offices are located or do you rent the property?

A. We own the property in which three of them are located and rent the property in which the fourth is located.

Q. Can you state where they are located?

A. Yes, sir.

The MASTER: Wasn't that all gone into before?

Mr. BURR: Where they are located?

The MASTER: Yes.

Mr. BURR: If it was I won't bother with it now. I don't recall it.

827 Q. Have you previously stated that?

A. I think so. The Hester street branch is located at Hester and Elizabeth streets, which property we own. The Irving place branch is located at Irving place and Fifteenth street, and the building is owned by the company; the Forty-second street branch is located on Forty-second street, near Sixth avenue, in premises that the company rent, and the Third avenue branch is located at Third avenue and 114th street in a building owned by the company.

Q. Now, that item of expense with those branch offices, does that embrace salaries?

A. Yes, sir.

Q. What else?

A. And incidental expenses.

Q. What is the nature of the incidental expenses?

A. Their name is legion. I can name some of the principal ones; there would be the stationery and printing which would be a very large item and would include all the ledgers and books of accounts and records kept at the branch offices; it would include such supplies as would be necessary in an office, telephone service, ice and things of that kind.

Q. At the branch offices you have bookkeepers and collectors and inspectors of meters, have you?

A. Yes, sir.

Q. Any other kinds of employees besides bookkeeping force and the inspectors of meters and the collectors?

A. Well, the bookkeeping force of course would include a number of clerks not specifically engaged in bookkeeping, general clerks engaged in the performance of various duties, and the men who do the indexing are rather connected with the shop than with the branch offices and their pay—yes, would be included. I might say also, Mr. Burr, that that item of expense includes the expenses of the fitting shops and the street department as well as offices. The expenses of the offices of those departments are also included in

828 that item both with respect to salaries and with respect to the incidental expenses.

Q. Do you have in connection with each office a repair shop for stoves?

A. No, we do not; we have one general repair shop.

Q. And have you an account with each of these branch offices?
A. Yes, sir.
Q. Do they render monthly statements to the general office?
A. They do; yes, sir.
Q. And those statements are transcribed into your general books of accounts at the main office?
A. Yes, sir.
Q. Who verifies the statements at the branch offices?
A. To which statements do you refer?
Q. The statements furnished by the branch offices to the main office. How do you arrive at the correctness of such statements?
A. We get such a large variety of statements that before indicating how we establish their correctness, I would like to know the particular statement to which you refer.
Q. For instance they render an account monthly of their expenses, do they?
A. No, sir, they do not, the pay rolls would indicate the expenses so far as labor is concerned.
Q. How about supplies?
A. And the supplies would be shown by the bills, which would be paid at the general office and charged against the particular branch where the supplies were received.
Q. Where are those vouchers or bills kept?
A. At the general office.
Q. In Exhibit 94, the corresponding item of expense is given as $490,855.36. What is the explanation of that difference in the amount?
A. Well, you asked me that question yesterday unless I am very greatly mistaken, and I am having a comparison drawn off and an explanation made of the variation.

Mr. BURR: It is not in evidence.
829 Mr. MATHEWSON: What is it?
Mr. BURR: I refer to the statement which you, Mr. Carter, furnished for the calendar year 1905, Expenses, General Office, $99,807.42; Engineering Department, $38,211.95. What items go to make up that item of General Expenses, $99,807.42?
The WITNESS: That is made up of salaries, salaries of officials, heads of departments in the general office, general clerks, stenographers and other employees of the general office.

Q. And you have a charge then for the bookkeeping department and collecting department?
A. I have not included them in my statement just made respecting that item.
Q. What particular department is the General Expense item confined to?
A. It is not any particular department, and that is why we call it general; if it were a particular department we would give its name as we did with the bookkeeping and the engineering departments.
Q. Were some other expenses embraced in the General Expense item?
A. No, sir.

Q. Then it must be outside of the other departments?
A. That is the case, it is general.
Q. Can you give me an analysis of that item?
A. General Expense?
Q. Yes; will you prepare an analysis?
A. The analysis will be the names of the people who appear there; that would be the only kind of analysis that could be made.
Q. Their salaries are separate from the payroll?

Mr. MATHEWSON: Of course the salary of the president, the vice-president or even Mr. Carter is not included on the payroll.

830 Q. I want to know whether these items you speak of are properly chargeable against the manufacture and distribution of gas; that is why I would like to have an analysis of the general item of $99,807.42.

Mr. MATHEWSON: I think you better bring the books, Mr. Carter, and see what they are.

Mr. BURR: Very well, bring the books.

The WITNESS: I should say it covers the salary of about 49 or 50 people, that $99,807.42, and includes the salaries of the officers of the company. I can bring the operating ledger; I don't know just how much that detail would show, but I think not much.

Q. What is the item of incidentals, $67,834 made up of?
A. What is the exhibit?
Q. The same exhibit to which I have referred, being Expense, General Office.
A. That is for the calendar year 1905.
Q. 1905?
A. $67,834.

Mr. BURR: I ask to have this paper marked for identification.
Paper marked for identification City's Exhibit 8.
Mr. MATHEWSON: Excluding the pencil portion?
Mr. BURR: Certainly.
Mr. MATHEWSON: Those items to which you refer, Mr. Burr, are a subdivision of what total?
Mr. BURR: On the total of $339,999.51.
The MASTER: That is a subdivision of Expense, General Office?
Mr. BURR: Yes.

Q. Now I will ask you to refer in City's Exhibit 8, marked for identification to-day to the item Incidentals, $67,844.31,
831 which appears on that exhibit. What does that embrace?
A. A great many items of disbursements of various kinds, corresponding approximately with the same kind of expenses as branch offices, known as incidental expenses, taking in stationery and printing, cleaning up of the offices, telephone service and messenger service possibly.
Q. Is it made up of any items of expense at the different stations?
A. No. Nothing included there that belongs to any station.
Q. It is general office?
A. General office only, Mr. Burr.

Q. And the item "New business," $60,575.28, what is that made up of, of the expenses of procuring new business?

A. Of the expenses of procuring new business, and includes canvassers, commissions, commissions for the sale of appliances, the cost of publishing a small gas journal for the information of customers and expenses of that kind and the fuel appliance department pay roll.

Q. Then you have a department for drumming up new business, is that so?

A. Yes, sir, that is the case.

Q. Claims and Damages, were those chargeable as general office expenses?

A. Yes, sir.

Q. What kind of claims for damages are those?

A. They are claims for damages on account of injury done to employees principally or to the public possibly in some cases.

Q. Does that represent the amount of claims that were paid during the year 1905, or the amount of claims that were made during the year 1905?

A. The amount of claims that were paid.

Mr. MATHEWSON: The item would be considerably larger if it included two or three claims that were made.

Q. This item General Office Expense appears in the operating ledger?

A. Yes, sir.

832 Q. And the total of these various items appear in the journal?

A. No, because the journal would not be used in connection with the posting of items of labor, they are posted directly from the pay roll.

Q. Well in what book would the details of the item incidentals, $67,844.31 appear.

A. Every item entering into that aggregate would appear in the operating ledger.

Q. In Exhibit 93, there is an item Interest on Consumers' Deposits, $52,315.73, and the same item is given in Exhibit 94 as $51,391.52.

A. There is embraced in that item interests paid on deposits made by consumers to secure their accounts.

Q. How do you compute that interest?

A. At the legal rate, six per cent. I believe.

Q. Isn't it a fact that their deposits are absorbed in most cases by their last bills?

A. That has no bearing upon the interest, Mr. Burr. The interest is calculated upon the full amount of the deposit for the full period it remains with the company. Then it may be offset constantly by the amount due to the company from the consumers, which is usually the case.

Q. Well, you pay the interest in gas, not in cash; you give a credit to the consumer, don't you?

A. Not when the consumer closes his account. He presents his deposit receipt, and he gets the amount of his deposit plus the interest upon it that remains with the company, less any final bill he owes, naturally.

Q. Where he allows the deposit to be used in payment for the gas consumed——

A. We don't allow it to be used. The amount of the deposit is no more than he owes the company from time to time in the normal condition of the account.

Q. Do you want to be understood as saying that this item on Exhibit 93, Interest on Consumers' Deposits, $52,315.73, and the
833 same item appearing on Exhibit 94, Interest on Consumers' Deposits $51,391.52, was actually paid out to your consumers?

A. Yes, sir.

Q. In 1905?

A. In 1905. In one case during the nominal year ending October 31, 1905, and in the other——

By Mr. MATHEWSON:

Q. At what rate?

A. The legal rate, six per cent.

By Mr. BURR:

Q. Do you recall, Mr. Carter, if there was an exhibit introduced in evidence before the Gas Commission showing the amount of gas sold each year and the rate at which it was sold since 1884?

A. I think there was such a statement prepared and presented before the Gas Commission; that is my recollection.

Q. Look at the paper I hand you, Mr. Carter, and say whether that is a copy of a statement furnished by you to the Gas Commission purporting to give the amount of gas increment and the rate per thousand cubic feet and the amount realized from the increment each year, from 1886 to 1905?

Mr. MATHEWSON: We did not prepare any such statement as that for the Gas Commission.

The WITNESS: I don't recognize it as any paper that I ever saw before, Mr. Burr.

Q. Will you look at it and say whether it correctly represents what it purports to represent and state?

A. It would be impossible to do that. I cannot say that this is correct, Mr. Burr, from simply scrutinizing it here. I should have to compare it with our records to establish its accuracy.

Q. Well, will you, with that as a basis, have prepared such a statement from your books?

Mr. MATHEWSON: Let's see.

834 The WITNESS: It goes back a long time.

Mr. MATHEWSON: The amount of gas sales each year is already in evidence. It will be a simple thing to give the average price at which gas was sold in each year; that is all made up excepting the year 1905, perhaps including that, and that will show simply

by mathematical process everything that is asked for by this exhibit, that is to say how much the increment one year over another is will appear simply by subtracting those two amounts. That first column is already in evidence.

The MASTER: Well, as appears in evidence——

Mr. MATHEWSON: No, but we have the price.

Mr. BURR: I inquired about the matter and I was informed that no such exhibit was presented.

Mr. MATHEWSON: You are quite right. No such exhibit has been presented.

Q. Have you made up a tabulated statement, Mr. Carter, of the taxes paid by the company and upon what——

A. For the year 1905?

Q. For the year 1905.

A. Yes, there has been such a statement made and it is in the evidence.

Mr. MATHEWSON: Don't you want to put that in in connection with your examination, Mr. Burr.

Mr. BURR: What?

Mr. MATHEWSON: That table Mr. Carter just gave you.

Q. What property is embraced in the item Taxes $803,127.46 appearing in Exhibit 93?

A. The company's real estate, its personal property and its special franchises.

Q. Does that represent the actual amount paid on the real
835 estate and the personal property?

A. For 1905, yes. In testifying to 1905 I testified to the calendar year. It is the better year to take because it represents the tax calendar year instead of two years split up on some arbitrary basis.

Q. Are you familiar with the tax rate in New York, do you know what the tax rate is?

A. Why, I don't know from memory. For what year?

Q. For 1905.

A. 1.4/10 and a fraction, a long decimal fraction, some six figures long, I haven't a memorandum of that.

Mr. MATHEWSON: I think it is 1.49.0519. I am willing that the witness should so answer subject to correction if he so desires.

The WITNESS: I would testify that that is right.

By Mr. MATHEWSON:

Q. What is the rate of the tax assessment in the city of New York for local taxes, &c.?

A. For 1905?

By Mr. BURR:

Q. For 1905.

A. That was my understanding of what the question covered.

Mr. MATHEWSON: In the Borough of Manhattan. They differ somewhat in the different boroughs, don't they, Mr. Burr?

Mr. BURR: Yes.
The WITNESS: In the Borough of Manhattan.

Q. Have you got a statement showing the amount of gas supplied by each of the subsidiary companies from whom you purchased year by year or month by month?
A. For what period, Mr. Burr?
Q. Well, say for 1905.
A. I haven't such a statement, but I am having such a one
836 prepared for Mr. Heyward at his request.

Mr. BURR: Until these things are provided it is hard to cross-examine.

Q. There is a variation in the price charged by each of the companies, is there not?
A. They are not identical, but I think it is not considerable.
Q. For instance, what does the Northern Union charge?
Mr. MATHEWSON: Nothing. We get no gas from the Northern Union.
The WITNESS: The Northern Union Company does not manufacture gas.
Q. Can you say what is the lowest price and what is the highest price you pay any of these companies for gas which you purchase?
A. I could not do so, Mr. Burr, without the statement before me. I can say that the average price paid was 34.04 for the gas manufactured for the Consolidated Gas Company by other companies for the calendar year 1905. Now, we may have paid one or two companies over 34.04 cents, or one or two companies under 34.04 cents, but the average was 34.04 cents. I don't think there was a very considerable variation from that figure for the amount paid per thousand feet to any of the companies.
Q. That 34.04 cents embraces the ten cents you were obligated to pay them under your contract?
Mr. MATHEWSON: No, not ten cents.
The WITNESS: It includes ten per cent.
Q. Look at Exhibit 60, as it appears on page 459 of the printed record before the Gas Commission, and say whether that was
837 prepared by you and whether it correctly sets forth the amount paid by the Consolidated Gas Company for the years stated?
A. I cannot say that it has been correctly copied into this book, Mr. Burr.
Q. That book at which you are looking is the book on appeal, is it not?
A. Yes. I think the figures are substantially correct. Of course there is no statement here of the price—or of the cost to the Consolidated Gas Company of gas manufactured for it by other companies later than 1904. The figures as contained in our Exhibits 93 and 94 cover the calendar year 1905, in one case ten months of the calendar year 1905, and in the other two months of 1904; and I think that the difference between the amounts paid the different companies were

less during those two periods than during the period shown in this Exhibit No. 60.

Q. Before the Gas Commission?

A. Before the Gas Commission.

Q. Where will the account with these companies be found in your books, showing the amount of gas produced and delivered from month to month by the companies to the Consolidated Gas Company?

A. The bills that are rendered for gas manufactured for the Consolidated Gas Company by other companies are a matter of record in the operating ledger.

Q. Well, those bills would appear in the voucher record, would they not?

A. Yes.

Q. That would show the amounts purchased and the prices paid?

A. Yes.

Mr. MATHEWSON: I do not wish to split hairs, but Mr. Burr constantly refers to the amount purchased. The fact is that all this gas is made by these companies under our agency agreements by which they make it in that manner and it is not a purchase and sale
838 in the ordinary sense. As long as the distinction is understood, that is all I care about.

Mr. BURR: As I understand it, I have not yet seen the agreements, have they all been offered in evidence.

Mr. MATHEWSON: All have been offered in evidence.

The MASTER: I do not see that it makes any difference. It is referred to here in this report as gas made under agency agreements, and if Mr. Burr chooses to call it something else for his own amusement I do not see that it hurts you any.

Mr. GANS: The distinction is pretty fine between gas obtained from some other source and paid for.

Mr. MATHEWSON: Perhaps so.

Q. At the time the companies were consolidated in 1884, each of them had a certain defined territory in which they were operating at that time, did they not?

A. I think not; I think that the territory covered by each company had its limitations, if that is what you mean, but that every company operated in a territory of its own, I am sure was not the case.

Q. Each company had its limitations?

A. With respect to its distributing system.

Q. That is, they claimed certain rights in the streets to use that distributing system in the streets?

A. Most decidedly.

Q. If I remember rightly you testified that a valuation was placed at that time upon the rights which they had at that time in the streets, among other rights?

A. Yes, sir.

Q. And it was definitely ascertained at that time, in order to place

a valuation upon it, where they were in the streets, and what
839 streets they were in, in November, 1884?

A. Not to my knowledge.

Q. Are you quite clear about it?

A. I am not at all clear about it because I do not know anything about it. I am clear about that.

Q. You do not know whether maps were made of the mains of each company at that time, as they then occupied the streets of the city of New York?

A. I think most undoubtedly that every company had maps of its mains at that time; I only assume that they had, I do not know anything about it.

Q. The valuation was placed upon those rights in the streets as they existed in November, 1884, at the time the consolidation agreement was executed, is not that the fact?

A. Presumably.

Q. Were not the maps purporting to show the location of the mains of these various companies produced before the Gas Commission?

A. Not that I am aware of.

Q. Mr. Simpson testified that when he takes up a main or puts down a main he makes a report to the main office and that goes to you. Have you any such reports?

A. Yes, sir.

Q. Has the Consolidated Gas Company got any maps showing the location of its mains in the City of New York?

A. It is more than likely; I do not know anything about it. It is out of my department and I do not concern myself about it. I presume the mains are indicated on some map, but I do not know what they are like or where they are or anything about them.

Q. According to one of the statements that you submitted here, the company has on hand about $6,000,000 in cash?

A. To what statement do you refer?

Q. Have you made any statement, or is it the fact, that the company has $6,000,000 in cash on hand?

A. At the present time?

840 Q. Yes.

A. I think not; my impression is that they have not $6,000,000 of cash on hand at the present time.

Q. How much cash have they on hand?

A. I don't know.

Q. How much cash had they on hand at the end of the year 1905?

A. You have a balance sheet that indicates it, one that has been copied from the balance sheet at No. 4 Irving place.

Q. Where is the cash of the Consolidated Gas Company deposited?

A. In several banks.

Q. In what books will the statement of securities and obligations of other companies acquired by the Consolidated Gas Company since 1904 appear?

A. I have a list of them in my desk, of the record that is made up.

Q. In what book will they appear?

A. In the operating ledger, summarized; I do not think they would appear there in much detail.

Q. Do you mean to say that the list in your desk is more complete than the entries in the books?

A. Yes, I think probably it is.

Q. And the book entries were made from the statement you have in your desk; the statement in your desk was not made from the books?

A. No, nothing of that kind. We purchase securities of other companies; it is a regular business transaction; they are paid for, and a charge is put into the books. It is not spread out in detail on the books, as it would not serve any purpose to do so.

Q. Have you the balance sheet of June 30, 1904, here?

A. No, I have not. You have it somewhere. 1904, June 30th.

Q. Yes.

A. No, I have not got it.

Q. Do you recall that balance sheet, the items of it, without having it before you?

A. No.

Q. Have you produced the contracts for coal and oil?

841 A. I do not think I have produced any contracts.

Q. You were asked to some few days ago.

Mr. MATHEWSON: I do not think he was. I told you we would produce them if you required them.

Mr. BURR: Well, will you produce them to-morrow?

Mr. MATHEWSON: Yes.

Q. Before the Gas Commission, you were asked this question?

Q. Now, if we take the balance sheet as it appears in the company's book under date of June 30, 1904, and look under the head of investments and these various amounts itemized as real estate, $11,163,537.08 and plant, $15,318,197.68, and a variety of other items, aggregating some forty-eight millions of dollars, tell me whether it is not the fact that all the items included in that $48,000,000, with the exception of the item of street mains, Manhattan, $7,524,358.46, and street Mains, Bronx, $47,450.37, are not represented in the statement of the value thereof by this item in the report of June 30, 1904, "Real estate and plant, $19,673,075.42?" A. Together with the value of the meters, etc., as given in the report and which appear there also.

Do you recall so testifying?

A. I think possibly I might have testified to that effect; I do not recall it very well.

Q. I am now reading and propose to read something further, from the "Printed papers on appeal from order made by the Com-

842 mission on Gas and Electricity of the State of New York," prepared by Messrs. Shearman & Sterling, attorneys for defendant-appellant, the Consolidated Gas Company of New York.

A. I think I testified exactly as you have read.

Mr. MATHEWSON: If the Master please, the tax report for June 30, 1904, has been offered in evidence and is part of the evidence in

this case, and it shows how it appears; it shows just what it does show, and I do not think it is going to illumine the situation much by getting the witness to say that it does. The tax report figures differ from the cost or investment figures as they appear on the books of the company, and Mr. Carter has explained, or I assume he will before he gets through, explain the reason for the differences; but that they existed there can be no question and there is no dispute.

Mr. BURR: I wish to get at it in my own way, if you please. You can straighten that out on redirect. It is in the evidence here as brought out by Senator Page that a certain tax report was made and signed by Mr. Carter as an officer of the Consolidated Gas Company, and the details of that report were specified and mentioned by the witness to Senator Page. I will now proceed to call his further attention to the balance sheet which was referred to him and handed to him before the Gas Commission.

Mr. MATHEWSON: I am not going to object to it. I merely suggested that perhaps it was not throwing any additional light on the subject. If you think it is I have nothing to say.

The MASTER: There seems to be no question before me. You may proceed when you get ready.

843 Q. I am calling your special attention to the testimony given by you before the Gas Commission as it appears on page 371 on the record on appeal, to which I have just referred. You were asked:

Q. I wish you would take this balance sheet of June 30, 1904, and deduct from these figures under the head of "Investments" which totalize $47,880,470.32, whatever items are not included in the items in the report of June 30, 1904? "Real estate and plant, $19,673,075.42?" A. There is no item that is not included there. Every item is included there, Mr. Hughes.

Q. Are you not mistaken in that? A. I think not.

Q. Now, for example, we notice here in the report of June 30, 1904, Mains and Services as a separate item? A. As a separate item and given at a value which is explained in another part of the report to the Board.

Q. Pardon me. I do not think you follow me. Do you understand what I mean? A. I understand what is meant. That is given in detail in another part of the report.

Q. Undoubtedly? A. Stating the value of the mains based upon the cost of reproduction, less a reasonable depreciation, and it states——

Q. Do not anticipate me, because I am not inquiring as to that now. You have here June 30, 1904, a series of items under the head of investments, which totalize $47,880,470.32? A. Yes, sir.

Q. Now, you have as part of those items, an item here, "Street Mains"? A. Yes, sir.

Q. As part of those items? A. Yes, sir.

Q. You have also another item included in the title of
844 meters. Now, in your report of June 30, 1904, Mains and Services are in separately? A. Yes, sir.

Q. The meters are given separately? A. Yes, sir.

Q. I want to know what the property is that is detailed in this balance sheet of June 30, 1904, and totalized there which you, in making up the report of June 30, 1904, valued as real estate and plant, $19,673,075.42? A. Oh!

Q. Now, then, if you will give that? A. Included in the value of real estate and plant, $19,673,075.42, what is itemized on the balance sheet as real estate, plant and construction. It would include the extraordinary additions at the generating stations.

Q. Just read on the record the items that are in the balance sheet with the values—not the value but the figure opposite the item as they appear by the balance sheet which you entered in this item in the report of June 30, 1904, as of the value of $19,673,075.42? A. I have read the names of the items.

Q. Just read that right on the record, if you will? A. That is all.

Q. I mean consecutively the items and the amount opposite them from the balance sheet? A. You want me to read those on?

Q. Yes. A. (Reading:)

Real estate	$11,163,537.08
Real estate "M"	50,588.65
Plant	15,318,197.68
Assessments	2,353.98
Construction	9,882.09
Extraordinary repairs, 21st St.	2,718.62
Ditto, 44th Street	3,424.26
Ditto, 99th Street	557.98
Generating apparatus, 21st St.	119,931.33
Ditto, 44th Street	42,241.34
Ditto, 99th Street	49,158.08

845 Down to that point, Mr. Hughes (indicating).

Q. Down to this point (indicating)? A. Down to this point (indicating).

Q. Now, will y-o totalize those, please? A. $26,762,591.09, I make it.

Q. Then the amount that you have read of Real Estate Plant which were carried in the books at $26,762,591.09, appear in the balance sheet of June 30, 1904, at that total, you decided were of the fair value of $19,673,075.42? A. Yes, sir.

Is there any correction that you wish to make in that answer or any of the other answers, or in any of that testimony as I have just read it. Did you so testify?

A. Yes, it sounds very familiar to me.

Q. Did you so testify?

A. I think I can reply affirmatively; I think I did, to the best of my belief and knowledge.

Mr. BURR: Do you wish to make any correction in that testimony, Mr. Mathewson?

Mr. MATHEWSON: Simply this, that "real estate" and "plant" should be separated by a comma, because there is no such item as

real estate plant. There are two items, of real estate and plant. That is the case, is it not?

The WITNESS: That is the case.

Mr. BURR: The testimony continues:

Q. Now, the next item in the report of June 30, 1904, is Mains and Services, $4,261,156.39. What items in the balance sheet of June 30, 1904, in your books are embraced in the item just read. Just read, please, upon the record a description and the figures given in the balance sheet? A. Street Mains, two items,
846 $7,524,358.46 and $47,450.37; Services, $1,227,931.86.

Q. Will you give the total of those, please? A. $8,799,-740.69.

Q. And then Mains and Services which appeared in the balance sheet of June 30, 1904, at the book value of $8,799,740.69, you decided to be of the actual value of $4,261,156.39, and so entered them under the heading 'Mains and Services' in the report to the State Board of Tax Commissioners? A. Based upon the cost of reproduction, less depreciation.

Q. Whatever it was based upon, you entered it as actual value? A. Yes, sir.

Q. Of those mains and services? A. Yes, sir.

Q. And as you stated a moment ago, in another part of your report you set forth the extent in feet of the pipes of your company, which appears in the separate schedule verified by you under date of November 30, 1904, annexed to said report, in which the total feet are given at 4,605,681? A. Yes, sir.

Q. And you would state the present value reproduced now would be $5,613,221.12, and the present value, allowing depreciation, was $4,261,156.39? A. Yes, sir.

Q. In other words, you decided after your conference with the parties who were acquainted with the facts, with your own experience and knowledge of the facts, that it would cost on June 30, 1904, to reproduce new the mains and services of the company the sum of $4,261,156.39? A. That was the estimate, yes, sir.

Q. Yes? A. Yes.

Q. And that considering the age and condition of the pipes of the Consolidated Company, there should be deducted from that for depreciation a certain amount, and that the present
847 value of your pipes, allowing for that depreciation, would be $4,261,156.39? A. Yes, sir.

Q. Did you so testify before the Gas Commission?

A. To the best of my recollection the testimony was as you have read it.

Mr. MATHEWSON: Mr. Burr, may I simply say this, Mr. Carter undoubtedly testified in that general line, and quite likely all those exact figures are correct, but as I said yesterday, in going over the record we found so many little errors in amounts, that I would hate without verification to have him say that that was exact as to figures.

The WITNESS: And I do not even know that Mr. Burr has read

the figures rightly as they appear there. He may have read figures that are not there at all.

Mr. BURR: I am incapable of such a thing.

The WITNESS: I do not mean that you did it purposely.

The MASTER: I understand the witness to say that it being correctly printed and correctly taken by the stenographer, he so testified, but that he does not vouch for it; that he testified along those lines. All those figures are subject to correction of course. I do not see how any man could undertake to carry all those figures in his head and reply to such a question.

Mr. BURR: I am reading from the official book on appeal. The examination then continues:

848 Q. Now, the next item in the report of June 30, 1904, is Bonds and Obligations of other Companies, $8,686,744.70, and the next item is stocks of other companies, $46,674,034.27, making a total of $55,360,778.97, and in that balance sheet of June 30, 1904, I find the heading "Securities," Stocks and Bonds of Other Companies, $54,581,009.17. There is a small difference. Will you explain that? A. The amount there exceeds this, doesn't it, Mr. Hughes?

Q. Yes. A. I think it is quite possible there may have been something included. Let me glance through it a moment. Well, there were obligations of the United Electric Light & Power Company for coupons unpaid, amounting to $759,144.80, and there were coupons of the Brush Electric Illuminating Company due and unpaid, amounting to $20,625. There is $779,769.80 there. Probably that will make up the difference. It should be deducted from that—from that amount you have.

Q. Add that amount you have to the $54,581,009.17. Then what is included in the item of the report, Bonds and Obligations of other Companies and Stocks of other Companies making a total of $55,360,778.97? A. There were included in that amount, Mr. Hughes, such of the securities as we owned at that particular date as are shown December 30, 1901, on the schedule that you have been furnished with.

Mr. MATHEWSON: That should be June 30th, should it not?

Mr. BURR: Yes, it proceeds to correct it.

It continues:

849 Q. On June 30, 1904, you mean? A. I say June 30. Q. You said December 30, 1901. You mean June 30. You stated December? A. As of June 30, 1904.

Q. In other words, those securities and bonds and obligations and stocks of other companies were stated in the report as to the State Board at exactly the same figures as they appear in the balance sheet? A. Yes, sir, precisely. Yes, precisely so.

Q. Only there is one item and they are divided into two or three items? A. Divided because one is personal property and the other is not. That is the reason for the division. The bonds and bills receivable, notes and that sort of thing form one class of assets. They are personal property.

Q. Without going into that—— A. That is the reason for the division.

Q. —the assets. The point is that the bonds and obligations and stocks of other companies are stated in the report at the same valuation that they are carried in the balance sheet? A. Yes, sir.

Q. Now in the next item in the report of June 30, 1904, is material and supplies $697,014.92. Is there a corresponding item in the balance sheet. A. Well, there is something approximating it. There is $570,000 of gas making material and $126,000 of material used for distributing purposes. That would make a total of $696,000 approximately.

Q. $697,014.92. A. That is it. These two items contain the two.

Q. One hundred and twenty thousand what is the first? A. The two items are $570,891.56 and $126,123.36.

Q. One hundred and twenty-three thousand? A. It is $126,-123.36.

850 Q. Yes. Then the item "Material and Supplies $697,014," in the report of June 30, 1904, is made up on the item "Material and Supplies $126,123.36," and gas making material totalized at $570,891.56 in the balance sheet of that date? A. Yes, both materials together used in the gas business.

Q. And both carried into the report of June 30 at the same valuation as they appear in the balance sheet? A. Yes, sir.

Q. Now the next item in the report of June 30, 1904, Accounts and Bills receivable $1,944,968.09. Will you give me the items which appear in the balance sheet of that date which make up the amounts stated in the report? A. What is that amount? May I look at the report a minute?

Q. Accounts and Bills receivable? A. I should have to get my original figures. I am not able to match that up from the items here. It would probably take a little time t[illegible]just match that up.

Q. You cannot identify them? A. Not p[illegible]ticularly.

Q. At the moment? A. Not at the moment. They do not stick out here plain. The amount given here is $1,911,619.60.

Q. That is given in the balance sheet? A. That is given in the balance sheet and I understand it is $1,944,698.09.

Q. Ni[illegible] sixty-eight? A. The difference of $32,748.49, which is made up of probably two or three other small items here.

Q. Now, the next item in the report of June 30, 1904, is Cash on hand, $1,146,867. Is that item in the same amount in the balance sheet? A. No, it is not $1,146,000.

851 Q. Eight sixty-seven? A. There is $1,077,338.28, $20,-700, and there is an item of $39,052.50.

Q. Then we have Unclaimed Dividends as separate items? A. All right.

Q. Leave that out? A. Oh, well, the other items $48,826.61, I think will make it up.

Q. Now the next item in that report is $39,052 Unclaimed Dividends. Have you that item there? A. Yes, sir; that agrees with mine.

Q. That has a corresponding item in the balance sheet? A. Yes, sir.

Q. Then the next item in the report, Metropolitan Fund $500. There is a corresponding item in the balance sheet? A. Yes, sir.

Q. The next item is Contract rights, etc., $7,781,000, and is there a corresponding item of that in the balance sheet? There is, is there not? A. Yes, sir.

Q. You are familiar with that item of $7,781,000, are you not, and its origin? A. No, I am not. I have seen it on the books a good many years.

Q. It has been carried on the books for a good many years in that way, and you are familiar with it? A. I am very familiar with the sight of it on the books.

Q. You know the amount for which stock was issued at the time of the consolidation of the company in excess of the appraised value of the tangible property of the various constituent companies were taken up? A. I guess perhaps I could.

Q. It was put down as Franchises, Rights, etc., and carried in your books in that way right along and that was inserted in the report in the same way it appears in your balance sheet? A. Yes, sir.

852 Q. Now, the next and last item under head of Assets in the report of June 30, 1904, is "Meters, Stoves and other personalty, $2,667,330." Now, what items of the balance sheet in 1904 are valued or were valued by you at $2,667,330 and put in your book as Meters, Stoves and other Personalty? A. It would be impossible for me to give the amount. I could compare that very easily from the original data from which that report was made. I could make that up.

Q. Now, name the items and the amount that appear opposite the items in the balance sheet of June 30, 1904? A. Scows. You want the name of the item?

Q. Yes, scows, and the amount? A.—

Scows	$22,017.95
Pipes and specials	99,309.35
Meters	2,786,193.91
Meters, cocks and connections	317,902.99
Office furniture and fixtures	33,863.87
Horses, wagons and harness	28,408.23
Tools and implements	62,152.11
Gas stoves on hand	40,037.83
On rental	237,723.66
On loan	3,162.22

That is all.

Q. Will you now give the total of those items as they appear in your balance sheet? A. I beg pardon.

Q. Will you please give the totals of those items as they appear in the balance sheet which you have read off as having been embraced by you in the item 'Meters, Stoves and other Personalty' in the report? A. $3,630,773.12.

Q. And that amount of $3,630,773.12 or the property represented

by that amount in the balance sheet of June 30, 1904, you
853 adopted in the report to the State Board of Tax Commissioners under the head of 'Meters, Stoves and other Personal Property' as $2,667,329.77? A. Yes, sir.

Q. Now, it is a fact, is it not, that all the items of property embraced in the balance sheet of June 30, 1904, which aggregate under the head of investment the sum of $47,185,455.40 are included in the report given by you to the State Board of Tax Commissioners with a valuation placed by you thereon of $35,079,576? A. I would like to check those figures.

Q. Just check them right off? A. That is right, Mr. Hughes, $35,079,576.

Q. And the difference between $35,079,576 and $47,183,455.40 is what you deducted from the book value of the assets employed in the business of gas making in order to set forth what you believed to be the true value thereof, in the report of June 30, 1904, to the State Board? A. Yes, sir.

Q. Now, that $35,079,576 included $7,781,000 stated in the report, and having been carried, as you have stated, on your books from the organization of the company as Contract Rights, Franchises, etc. If you deduct that you have as the value of the rest of the property of the Consolidated Gas Company invested in the business of gas making on June 30, 1904, the sum of $27,298,576, have you not? A. No, sir.

Q. That is my deduction of seven—— A. Very erroneous, Mr. Hughes.

Q. — million, seven hundred and eighty-one thousand from $35,079,576. A. That is not so.

Q. That is an error? A. It is not an error, but we do not present it as an investment. We present is as actual value.

854 Q. We are not talking about presentments, we are talking about a certain mathematical calculation. A. You ask me that question. You ask me whether it represented the investment.

Q. We are talking about a certain mathematical deduction. I want to know whether I am not right in saying that if from the $35,079,576, you have mentioned as the value of the real estate, plant, mains, services, material and supplies, meters, stoves and other personal property of the Consolidated Gas Company, being all the assets of that company on June 30, 1904, outside of the bonds and obligations of other companies, accounts and bills receivable, cash on hand, unclaimed dividends, Metropolitan fund, $500, and the item of contract rights, etc., you deduct from that the $7,781,000, you have a balance of $27,298,576, have you not? A. We have a balance of actual value of the balance of the property of that amount, yes, sir.

Q. That is right.

Q. Did you so testify?

A. Substantially so I believe.

Q. But I am reading now from the record.

A. Assuming it to have been correctly taken and that you have read it correctly, I should, yes, sir.

Mr. MATHEWSON: The figures, I observe from reliable data that I have, are substantially correct, but there are slight variations in one or two cases, a dollar in one case and half a dollar in another, but they are substantially correct, I think. That is all that the witness means.

The WITNESS: Yes, that is it.

855 By Mr. GANS:

Q. You have no doubt that it is correct, except as to these minor details of figures?

A. No. That is the gist of the thing, the general drift of it.

By Mr. BURR:

Q. The testimony continues at page 381 of Volume 1:

By Senator GRADY:

Q. Let me ask right here—what distinction do you make between book values and the values reported to the State Board of Tax Commissioners? A. Senator, there is——

Q. Now, begin as to the real estate and plant? A. The property of the Consolidated Gas Company was acquired through—largely through the issuing of its stock to the companies that consolidated in 1884. The valuation that we have represents the stock issued for those companies together with additions made by the payment of cash from time to time until the present date, and the total value given here of $47,183,455.40 represents the value that the Consolidated—the cost to the Consolidated Company of those properties in its stock and in cash as distinct from its value upon a basis of the cost of reproduction, or less deterioration in value. You said there was something in the report that guided you in making your value—some statement in the report to the State Commissioners? A. That—not guided us, Senator, but that explained that the—that the balance—statement of assets and liabilities which appeared in that report did not purport to be a balance sheet of the company,

856 but a statement of the assets and liabilities at their actual value as nearly as we could ascertain it.

Q. Just take the report and read that statement? A. The statement calls for cost values and this note appears upon the statement "Cost in the above statement is not given for the reasons stated in the report for 1899." Now, if the report of 1899 is available I would be glad to read the reason that was given at that time.

By Mr. HUGHES:

Q. And has been read in evidence, Mr. Carter? A. May I read it at this particular juncture?

Q. As to your inability to state cost, I am not at all anxious, or how you endeavor to state cost. I am anxious, however, to ascertain, and I believe you have testified that the figures in there are the values on June 30, 1904, of that property. Is that not so? A. That is true.

Q. That is true? A. Yes, that is the value, as we estimate it.

Q. That is what I want to know? A. As of June 30, 1904, with depreciation taken off.

Q. I do not care what you took off in 1904. I want to know what it is worth? A. Shall I read this:

The CHAIRMAN: Yes, read that.

The WITNESS: "It is impossible to state the cost of the real estate, equipment, etc., for the following reasons: There are no records in the possession of the Consolidated Gas Company showing the cost to the constituent companies of the property which those companies transferred to the Consolidated Gas Company, which comprises the principal part of the property of the Consolidated Gas Company.

Much of the property was purchased by the constituent com-
857 panies more than fifty years ago, and the officers of the Consolidated Company are ignorant of the terms on which such purchases were made. When the Consolidated Gas Company was organized its stock was issued for the property rights and good will of the constituent companies. Such properties, etc., we paid for in cash. Further a statement of the cost would furnish no information which would aid in assessing the franchise in question. Because the cost, if known and stated, would bear no relation to the value of the same at this date, and also because in making the assessment in question the law requires that each special franchise shall be assessed separately. It is respectfully suggested to the Commissioners that the form of account stated in Schedule D as prepared from the old form used in railroad accounting is applicable to railroads, because each railroad corporation has a single franchise with reference to which such accounts as those in Schedule D are usually kept, as appears by the Railroad Commissioners' Annual Reports. The form is not such as is applicable to gas companies, and is not such as this company has ever kept. The officers of the Consolidated Gas Company, although desirous of complying with every reasonable requirement of the State Tax Law, have been themselves unable to adopt a statement in the railroad form or to report in the form of Schedule D."

Q. I do not think, Mr. Carter, we are under any misapprehension as to the fact that your company was organized, 1884, by the consolidation of several companies; as it already appears here
858 there was this appraisal of the value of the properties of the companies, and stock of the Consolidated Gas Company was issued on the acquisition of those properties, and stock was also issued in excess of the appraised value of the properties of the constituent companies to the amount of $7,781,000, which, under the description of contract rights, etc., have been continually carried forward by your company in its statement of assets and are included in that Schedule D of the report of June 30, 1904, which has been shown you. Now, then what I want to have you state, if you will, without going into any argument about it, for I simply want the fact, that in the statement of assets of June 30, 1904, in the report which you swore to be correct of that date, eliminating accounts and bills receivable, cash on hand, the securities which you hold of other corporations, and also eliminating this item of $7,781,000 of Contract

Rights, Franchises, etc., whether the remainder is not stated to be worth $27,298,576? A. On the basis of cost of reproduction, less depreciation; yes, sir.

Q. On the basis of value, Mr. Carter? A. Well, valued in that way, Mr. Hughes.

Q. It was what you believed it to be worth? A. Yes, sir.

Q. That is what we mean by value, is it not? A. Practically.

Q. What we mean by actual value? A. I only want to make it very plain, Mr. Hughes.

Q. When you were trying to make up this statement, in consulting the other gentlemen who knew about the matter your effort was to make a statement of the actual value, was it not? A. Yes, sir.

859 Q. And you believed that was the statement? A. We believed that, sir.

Q. And that statement of the real estate and the plant—— A. Always.

Q. The meters and services and everything outside of the cash assets and securities foots up $27,289,576? A. Yes, cost of reproduction, less depreciation.

Q. Now, when you say—I do not want, Mr. Carter, to take any advantage of your statement, I will bring out your explanation—that was the actual value as you believed it to be? A. Yes.

Q. When you fixed that as the actual value and you did it on the idea that was what it would cost to reproduce your gas making material new? A. Not that value, Mr. Hughes. There is a depreciation taken off, not cost of reproduction. That is not the cost of reproduction.

Q. Let me see about that. There is an amount taken off for depreciation in mains and services? A. Yes, sir.

Q. Is that right? A. Yes, sir.

Q. Then you mean to say that your plant was worth less on June 30, 1904, than a new plant produced on that date would have been worth? A. Yes, sir.

Q. Well, now, what we are trying to get at is what your plant was worth, and that we have in these figures, and that is something less than a new plant; is not that right? A. Yes, sir.

Q. And that plant is $27,298,576. That is right, is it not? A. I don't say that; no, Mr. Hughes. I don't say it was worth that. I say that is the value that we placed upon it on the basis of cost of reproduction, less depreciation. Now, you can say that was

860 what it was worth, but I won't say that is what it was worth.

Q. Then what was its actual value? A. Estimated actual value, yes.

Q. Yes. In other words, you say a new plant would be worth, reproduced, what we have with our generating plants, our distributing plants, etc., our holders, our mains and meters—a new plant would be worth so much; ours is not a new plant, ours is worth so much, and what ours is worth is stated in these figures. That is right, is it not? A. If you want to pin me down to the question of worth, Mr. Hughes, why I would like to be excused.

Q. Do you draw any distinction between value and worth? A. For this purpose, the purpose of this report, I would say——

Q. State what the distinction is between value and worth? A. The value of that plant, based upon the cost of reproduction, less depreciation, would have some value possibly from an investment standpoint, Mr. Hughes, because of its use, application, good-will of the people with whom the company was doing business, its relation with the public. That would contribute somewhat to its worth, but that would not figure in its value on the basis of cost of reproduction, less depreciation.

Q. You mean it might have a value of more than it was worth? A. Yes, sir—I don't say of more than it was worth—no. I don't say a value of more than it is worth.

Q. Well—— A. I say it might have a worth more than its value of the cost based upon reproduction, less depreciation.

Q. Well, put it the other way. Worth more than its value? A. More than its value obtained in this way and for this purpose.

861 Q. Now, without taking into consideration whatever you value your relations to the public and good will and the other intangible assets of that description, and setting down to properties which you set forth in your statement of assets, I simply want to have it clearly understood that what you there set forth in your report as your assets and liabilities, and the actual value of your assets thus set forth as the value of your real estate and plant, mains and services, material and supplies, meters, stoves and other personal property an aggregate of $27,298,576, that is the fact, is it not? A. I have testified, Mr. Hughes——

Q. Just answer that question. I want you to say whether it is right or not? A. Well, I have stated a great many times that it is, and I will state it again if you put the question right.

Q. I will ask you to simply state whether that addition is right. I do not want any dispute about the correctness of my figures. We will argue about it later on. A. Those figures you are showing amounting there to $27,000,000, represented our estimated value of this plant on the basis of the cost of reproduction less depreciation.

Senator PAGE: That is not the question. The question is whether these figures total up a certain amount.

The WITNESS: They total up twenty-seven million.

Q. $27,298,576? A. That is the total, $27,298,576; yes, sir.

Did you so testify, Mr. Carter, before the Gas Commission?

A. Assuming that the testimony was correctly taken and

862 has been correctly read, I should reply affirmatively.

Q. I have been reading, so that you may verify what appears upon the record, from the "Papers on appeal from the order made by the Commission of Gas and Electricity of the State of New York," in the matter of the complaint of Edward C. Keys and others, being upwards of 100 customers of the Consolidated Gas Company, and the complaint of R. H. and M. N. McGurrin and others, also being upwards of 100 customers of said company, in the New York Supreme Court, Appellate Division, First Department, Volume 1, pages from about 368 to 387, so that you may verify the testimony

as I have read it. And that tax report of 1904, regarding which you are testifying, was the report which you had made up after consultation with counsel and after consultation with Mr. Simpson who is in charge of mains, and with Mr. Bradley, the chief engineer to the company, is it not?

A. You refer to what tax report?

Q. The tax report regarding which I have just read your testimony, the tax report of 1904.

Mr. MATHEWSON: Give the number of the exhibit; it is in evidence here, State's Exhibit D.

(The question is repeated by the stenographer.)

A. My best information is that while Mr. Simpson furnished me with the value of the mains and Mr. Bradley furnished me with the value of the plants, those figures were not given me in connection with that particular 1904 report. They were given to me in connection with a report to the local Tax Commissioners for 1902, the report that was made the Second Monday in January, 1902, and this report, as was the special franchise report for 1902 and 1903, was based upon that same information.

863 Mr. MATHEWSON: And the same is true of 1904?

The WITNESS: The same is true of 1904; I am testifying with respect to 1904.

Q. Before the Stevens Investigating Committee, as appears by the record of the testimony, page 213, Senate Document No. 30, referring to this same tax report of 1904, you were asked by Mr. Hughes:

Q. In other words, you decided after your conferences with the parties who were acquainted with the facts, with your own experience and knowledge of the facts, that it would cost on June 30, 1904, to reproduce new mains and services of the company the sum of $4,261,156.39? A. That was the estimate; yes, sir.

Q. Did you so testify before that committee?

A. Yes, and I said a moment ago that the figures appearing in the 1904 report were based upon the same information, given to me by Mr. Simpson and Mr. Bradley in 1902.

Mr. MATHEWSON: And you so testified before the Gas Commission?

A. I so testified before the Gas Commission.

Q. Did you sign the tax report of 1902 as secretary of the company?

A. Yes. Well, not in 1902, I will not be sure of that.

Q. Did you sign it in 1899 as secretary of the company?

A. No, I did not. I was not secretary of the company in 1899, nor was I secretary in 1902.

Q. Did you sign the tax report in any official capacity on behalf of the Consolidated Gas Company of 1900?

A. No, sir. I think that the first report I signed was 1903,

864 possibly 1904. It certainly was not earlier than 1903.

Q. Do you remember testifying, either before the joint committee of Senate and Assembly, or before the Gas Commission, that that report was made up by you and signed by you after con-

sultation with eminent counsel, and upon the facts presented to you by Mr. Simpson and Mr. Bradley?

A. Well, I might before the Senate committee have conveyed that idea. I do not think I fixed the date of any conference or fixed the date when that information, or the information upon which that report was based, was given to me by Mr. Bradley and Mr. Simpson. I knew that I had obtained it from them and I must have made it clear in my testimony before the Senate committee when they gave it to me. It formed the basis, as I testified then and testify now, of the report for 1904, although it was furnished by them to me in 1902.

Q. Do you remember Mr. Mathewson's disavowing having any connection with the making up of that report at that time?

A. I do not remember it, and I think it would have been unnecessary; the matter was not referred to him at that time, to my recollection.

Mr. MATHEWSON: You stated that you had consulted counsel as to the construction of the law, or that you had been advised as to some construction of the law, did you not?

The WITNESS: I did state before the Gas Commission, and I think also before the Senate Committee, that the report was always submitted to counsel for their approval before it was filed with the State Board of Tax Commissioners.

By Mr. GANS:

Q. I think you testified that the counsel were Boardman,
865 Platt & Soley, and not Mr. Mathewson?

A. I think I testified that counsel in that particular case were Messrs. Boardman, Platt & Soley.

By Mr. BURR:

Q. I ask you to look at page 175 of the Senate Document No. 30, being the testimony taken before the Joint Committee of the Senate and Assembly, and say whether that is a correct copy of the balance sheet showing the assets and liabilities of the Consolidated Gas Company, June 30th, 1904.

A. I cannot say whether it is a correct balance sheet or not, or whether it is a correct copy of the balance sheet.

Q. It purports to be the record of the balance sheet showing assets and liabilities of the Consolidated Gas Company of New York, on June 30th, 1904, as they appear in the Balance Book No. 5, pages 59 and 60, being Exhibit 60A before the Joint Committee of the Senate and Assembly.

A. The total of the assets as they appear in this alleged copy of the balance sheet is $110,941,335.40. It is a trial balance sheet as of June 30th, 1904, and includes of course all the operating accounts.

By Mr. MATHEWSON:

Q. The balance sheet itself would not show that total?

A. The balance sheet would eliminate operating accounts and deal with what are strictly assets and liabilities. I have no doubt it is

correct, barring of course the possibility of errors, in printing, but without making careful comparison between that copy and the balance sheet itself I should not like to testify that it is a correct copy of it.

Mr. BURR: I ask that it be marked for identification.
866 Marked City's Exhibit No. 9 for Identification.

Q. In that Exhibit 60A before the Joint Committee of the Senate and Assembly, as it appears on page 175 of the record, I find an item under the head of investments, "real estate M, $50,588.65." To what particular real estate does that refer?

A. Well, it refers to a parcel of real estate that we accepted in settlement of money that was due us from a man that we were doing business with, and for the purpose of keeping it separate, we called it "real estate M" and it showed in that account. It was real estate which consists of vacant lots. I don't think there are any improvements on it.

Mr. MATHEWSON: The testimony showed at that time, in some other place, that it was used for storing coal.

The WITNESS: Used for storing coke.

Mr. MATHEWSON: Yes, coke.

The WITNESS: At the 42nd Street station.

Q. Does the company still own that real estate?

A. It is still on the books, yes, sir.

Q. Are you quite sure about that?

A. Quite sure. Our balance sheet, Mr. Burr, will show that item if it is there. I am very sure it is, but you can confirm it with your own balance sheet, at least the balance sheet I had prepared for you.

Q. This is what I want to call your attention to, Mr. Carter, before I dismiss this matter of the tax report of 1904. Your testimony as it appears on page 370 of the testimony before the Gas Commission appears to be reported as follows:

"Q. With whom did you advise in making this determina-
867 "tion of value? A. The engineers of the company. Q. "Who were they? A. Mr. Bradley and Mr. Woods. Q. "And who else? A. The assistant secretary who has charge of the "distributing system of the company."

Mr. MATHEWSON: That is all in evidence here already.

Q. Has the Consolidated Gas Company borrowed any money itself from any other companies or anybody else?

A. Do you mean to say does it now owe some other company money? It that what you mean?

Q. Yes.

A. You mean for supplies or material?

Q. For any purpose whatsoever.

A. Why yes, we owe money to a great many companies.

Q. I don't say owe money for material or for expenses; I say have you borrowed money?

A. No, there is no liability of that kind that I have any knowledge of or that appears on the books of the company.

Q. Referring to a loan of $350,000 borrowed by the Consolidated Gas Company from the New York Gas, Electric Light, Heat & Power Company in 1900, do you recall what that was for?

A. No, I do not, Mr. Burr. That loan was canceled in 1904 or 1905, I won't be sure which.

Q. You know nothing about that loan?

A. I know nothing about it.

Q. And were you secretary in 1900?

A. No, sir.

Q. You were chief accountant at that time?

A. I think I was comptroller at that time. I think the position I held at that time was that of comptroller.

Q. Where would that loan appear in the books of the company?

A. In an account entitled "The New York Gas, Electric Light, Heat & Power Company."

Q. Is there any record in the minutes of that loan, in the
868 minutes of the company?

A. Not that I am aware of.

Q. Will you look at the minute book and see if there is a record?

Mr. MATHEWSON: Mr. Master, I shall object to pursuing this inquiry further. I do not think it is instructive, the question Mr. Burr asked was——

The MASTER: I heard the question. What is the point, Mr. Burr?

Mr. BURR: I don't know why under the statement that is now before your Honor they should borrow money in 1900 and then not know what is was used for. I will ask Mr. Carter now—I understand you to say you do not know what it was used for?

The WITNESS: No.

Mr. GANS: Was that that City Bank loan?

The MASTER: That does not appear here as yet.

Mr. MATHEWSON: No.

The WITNESS: It might have been used for a great many purposes. It was borrowed unquestionably to replenish our cash account and I would defy anyone to say what it was used for. It was not applied to any particular purpose that I have any knowledge of.

Q. What evidence of indebtedness did you give for the money? In what form was it borrowed?

Mr. MATHEWSON: I renew the objection. This has nothing to do with what the assets of the company are here upon which we are
entitled to earn, and has nothing to do with the cost of gas
869 upon the statement before you. It has nothing to do with the return that we are entitled to upon our assets. What earthly use is there to pursue this $350,000 which we borrowed and which has been paid off.

Mr. BURR: I want to know the operations of this company for the year 1900, and I find a large item of $350,000 borrowed from another company, the New York Gas & Electric Light, Heat & Power Company. I am now examining the secretary of the company, who was

then the comptroller, and he says he does not know anything about that loan, he does not know what it was used for.

The MASTER: Conceding all that to be so, how is it material?

Mr. BURR: Then we may be able to show where other sums were borrowed and what was done with other large sums.

Mr. GANS: Was not the interest on that included in that statement of fixed charges?

Q. Was interest paid upon that loan?

A. I think it was.

Q. In what form was the indebtedness of the company presented or given? Was it in the form of a note?

A. Whether we gave notes for that sum I don't know. If we did, of course they were canceled when the amount was repaid. I think more than likely we gave notes for the amount, very likely.

Q. Have you any idea that that money was used for the Astoria plant?

A. No, I have no knowledge that it was. It would not surprise me if we might have used some of that for that purpose.

Q. How do you keep a record of what is done with any particular fund, how it is used?

870 A. If we set aside a particular fund for a particular purpose, why the books of account would show the employment of that fund for that purpose, but where we simply take cash and put it into our general fund, we do not attempt to identify the cash we take out of that fund for any particular purpose with any particular cash that went into the fund.

Q. If I remember rightly, in one of the statements that have been presented here there is an item of some $6,000,000 which, as I understand, is ready to be drawn upon for the purpose of the Astoria plant. Am I correct in that?

A. As of what date? because we have made several reports and I would not like to confuse the records.

Q. Well, as of the first of January, 1906?

A. I don't think that we made any report of that date. We have made a report as of October 31, 1905.

Q. Well, take it at that date.

A. Now, what is your question, Mr. Burr, please?

Q. (Question repeated by stenographer as follows:) If I remember rightly, in one of the statements that have been presented here there is an item of some $6,000,000 which, as I understand, is ready to be drawn upon for the purpose of the Astoria plant. Am I correct in that?

A. Yes, sir. We had at that time not less than that amount that we could employ for that purpose.

Mr. MATHEWSON: The proceeds of the debentures of 1904?

Mr. CARTER: That is the case.

Q. Is that a special deposit for that purpose, for the Astoria plant?

A. No, there is no special deposit for the Astoria plant.

Q. Well, you alluded I think the day before yesterday to some special deposit in the City Bank. What was that?

A. I alluded to the fact that for a while after the 1st of
871 January, 1905, the proceeds of the sale of the convertible debentures was carried in a special account which was ultimately merged in a general cash account of the company and it was carried at the present time and has been since that date.

Q. Was there any other money borrowed by the Consolidated Gas Company in 1900 to your knowledge?

Mr. MATHEWSON: I object to going further on this subject. There is no statement of operations in 1900 or anything of the sort here. It seems to me we are going far afield with no relevancy.

Mr. BURR: We have here in Complainant's Exhibit 86 a statement of the sales year by year and the number of customers.

Mr. MATHEWSON: Yes, sales of gas by the feet and the number of consumers. What has that to do with borrowing?

Mr. BURR: And the dividend that was declared that year appears on Exhibit 83 to have been 6 per cent. and the record in Exhibit 86 shows a great increase in 1900 both in customers and in sales over 1899. I want to know why it was necessary under those circumstances to borrow money in that year.

The WITNESS: You may recall, Mr. Burr, that during the latter part of 1899 and the first half of 1900 the price of gas was very low.

Q. You paid a dividend that year of 6 per cent.
A. In 1899?
Q. Yes.
A. I think not.
Q. In 1900?
A. In 1900 we paid a dividend of 6 per cent.
Q. And in 1899 you paid 5½ per cent.?
A. That is the case.

872 The MASTER: Now, what is the question that was objected to?

The STENOGRAPHER (reading): Was there any money borrowed by the Consolidated Gas Company in the year 1900, to your knowledge?

The MASTER: You may answer.

Exception.

Q. I don't know.

Q. Well, where will it appear in your books what money was borrowed that year, in that year?

A. Well, if there was any money borrowed during the year and carried over a month, it would appear in the balance sheet as a liability.

Q. Do you purchase your meters under contracts?
A. No, sir.
Q. How do you purchase them?
A. Principally from the American Meter Company.
Q. Do you buy as the result of competition, or do you buy these meters as you need them, without competition?
A. We buy them as a result of competition, I should say; the

American Meter Company giving us the best meter that is offered in the market and at as reasonable a price as we can obtain that meter, and they are doing a large enough business to supply our requirements, which no other company is.

Q. Is the price of meters the same from year to year or does it fluctuate?

A. Well, it don't remain the same indefinitely, but how often it fluctuates I should not like to say. There has been no change in price for several years.

Q. In the past ten years has there been any change in the price of meters?

A. Yes, I should say there had been.

Q. Do you recall what was the lowest price you paid for meters?

A. No, I do not.

873 Q. Or the highest price?

A. The lowest price we ever paid for meters is the price we are paying to-day.

Q. What is that?

A. Would you like to have the prices of the different meters?

Q. Well, I would like to know all about the meters, how many different kinds of meters are there?

A. I could give you that information. I suppose you don't expect me to carry that in my head. I have a memorandum of those things here. If you kindly say what information you desire I will try and give it to you.

Q. There is a large item of expense for meters——

A. Expense for meters? Meters are property. It is carried as an asset.

Q. You purchase them?

A. Yes, sir.

Q. There are three items of expense connected with meters, one for the purchase of them, the next is setting them and the other is the repairing of them.

A. We do not consider the first an expense. We consider it an investment.

Q. Well, call it an investment.

A. That is what it is.

Q. A variation of two dollars in each meter would mean a great deal of difference in that account, wouldn't it?

A. A difference of two dollars in the value of each meter or in the cost?

Q. In the cost.

A. It would make a difference in the value at which those meters would appear upon our books.

Q. Well, I suppose you know what you pay for the meters?

A. For what size?

Q. How many kinds of meters are there?

A. There are two kinds of meters, what we term ordinary meters and automatic pre-payment meters.

Q. The automatic meter is used where a person drops the money in the slot before getting the gas, is that right?

A. Yes, sir.

874 Q. And the other is the meter which regulates the amount of gas which the ordinary consumer who pays his monthly bills is supplied with?

A. It does not regulate it exactly; it registers it.

Q. Now, which is the more expensive of the two?

A. Why, the prepayment meter is the more expensive of the two because of the prepayment attachment on it.

Q. How long have you been using the automatic meter?

A. The automatic meter has been used by the Consolidated Company for a period I should say of not less than twenty years, possibly a little longer than that.

Q. What do you have to pay to-day for the automatic meter?

A. Well, what size, because we have three sizes of automatic meters.

Q. Well, the small size?

A. The small size, the 3-light prepayment meter, $7.65½.

Q. Is that the same price you paid last year?

A. Yes, sir.

Q. And the year before?

A. And the year before.

Q. And the largest size of the automatic meter, what is the price of that?

A. The largest size is a 20-light meter, which costs $12.70½.

Q. Is that the same price this year as it was last year?

A. Yes, sir.

Q. And the year before?

A. And the year before.

Q. And do you get those meters from the company that you have just named?

A. The American Meter Company, almost without exception, I think.

Q. Now, with regard to the other meter. What is the lowest cost of that meter?

A. The 3-light black meter, $4.38.

Q. And are there two different kinds, did I understand you to say?

A. No; there are three sizes of prepayment meters, 3-light, 5-light and 20-light, the term being used to approximate the capacity

875 of the meter for supplying gas burners. Of the black meters, there are 14 or 15 or 16 sizes, running from a 3-light meter to an 800-light meter.

Q. Is that paper from which you are testifying a list of all the different kinds of meters which are used and are in operation by the Consolidated Gas Company?

A. It gives that information, yes, sir.

Q. And from what book is that statement taken?

A. A statement from our record at Irving Place.

Q. Any particular meter book?

A. Yes, the book in which we keep a record of the changes that occur from month to month in the meters.

Q. That shows the number of each kind of meters that are in use to-day?

A. Yes, sir.

Q. Did you make up that statement yourself?

A. No, sir.

Q. That was made up for you?

A. That was made up for me.

Q. Now, with regard to the coal and the oil contracts, you are going to produce those, are you? Mr. Mathewson I understood said that he had no objection. You will produce those to-morrow, will you?

A. Yes, sir.

Q. On page 595 of the printed record of the testimony before the Gas Commission you were asked this question:

"Q. Are the plants operated by the Consolidated Gas Company "efficient for the production of gas in this community as distributed "to its consumers? A. Up to their present capacity absolutely so, "yes. Q. In addition to the matter of preference on account of the "location, what are the gains by the creation of the new plant being "built by the Astoria Light, Heat & Power Company? A. Noth-
"ing outside of location that, I think, could be predicated
876 "with any degree of certainty whatever; we trust some econo-
"mies, but that is problematical, and it awaits development.
"Q. So that the only reason that you offer for building that new "plant is the one resting upon preference in location and its desira-"bility from the standpoint of the residents of the City? A. That "is the sole ground."

Did you so testify?

A. Yes, sir, I did.

Q. In the bill of complaint, Mr. Carter, it is stated on page 11, folio 44, "Furthermore your orator has found it necessary to provide an extensive, additional plant in order to meet the increase in the consumption in gas in the City and county of New York." How do you reconcile that statement with the statement made by you before the Gas Commission which I have just read?

A. I don't see anything conflicting there, Mr. Burr. Assuming the necessity for the plant, the question would arise on location, and I testified that the advantage in going to Astoria was one of location. I didn't testify that we were constructing the plant at Astoria just simply because it was a good place to construct a gas plant. If I conveyed that impression I certainly conveyed a very incorrect one.

Q. Mr. Bradley has testified that the main reason in his opinion why the plant was being established at Astoria was to escape the persecution of the City departments.

Mr. MATHEWSON: I think you had better read Mr. Bradley's testimony. If he so testified, Mr. Burr, I do not remember it.

The MASTER: He mentioned that circumstance. I do not recall that he said it was the main reason.

Mr. MATHEWSON: Quite so.

877 Mr. BURR: Well, it is very important to ascertain what is the real reason and to get some reconcilement of the various conflicting statements, because it figures very largely in this ten per cent. depreciation.

Mr. MATHEWSON: There are no conflicting statements at all, Mr. Burr, as you will find by comparing them.

Q. On page 19 of the complaint it is stated, referring to the property owned by the company, "such property consists of the value of the connections between the pipes and mains of your orator and the various buildings throughout the City of New York, the value of various contracts owned by your orator in connection with its business. To what contracts do you refer in that complaint, contracts with consumers?

A. Oh, I presume reference is made to whatever contracts might be in force, or might have been in force at the time that contract was drawn.

Q. Do you know of any valuable contracts which the Consolidated Gas Company has outside the contracts with consumers for supplying gas?

A. I consider those very valuable, of course. The company has other contracts for the supply of material, that we think are advantageous.

Q. Those are the contracts for the disposal of the residuals?

A. For the disposal of the residuals, as well as for the furnishing of material required in our business.

Q. In the bill of complaint, page 23, it is stated "in the opinion of your orator and of persons familiar with the gas business in New York City, it is purely conjectural whether there will be any substantial increase in the sale of gas by reason of the said re-
878 duction in price; and any possible economies in the cost of production at Astoria will largely be offset by the increased cost of distribution, owing to the necessity of distributing the gas through a tunnel under the East River." Why didn't the Consolidated Gas Company build its plant itself in Astoria, do you know?

A. It is building it itself in Astoria.

Q. The Consolidated Gas Company?

A. Why, of course, it is using an organization that it has given a corporate title to for the purpose of doing the work in Astoria. The Astoria Light, Heat & Power Company is to all intents and purposes the construction department of the Consolidated Gas Company.

Q. Isn't the reason for incorporating the Astoria Light, Heat & Power Company that the Consolidated Gas Company has no authority to build over there for itself?

A. I don't think that the Consolidated Gas Company would require any more authority than the Astoria Light, Heat & Power Company has. The facts are as I stated them with respect to the relations of the Consolidated Gas Company and the Astoria Light, Heat & Power Company.

Q. In the bill of complaint it is stated further, describing the property of the company, "such property consists of the value of the connections between the pipes and mains of your orator and the various buildings throughout the City of New York, the value of various contracts owned by your orator in connection with its business, the value of the organization of your orator's business and good will, and various other elements of value which have been created and

developed by your orator and its predecessors." What are those other elements to which reference is made, if you know?

A. May I see the bill of complaint?

879 Q. Yes. (Handing same to witness.)

A. Well, I don't see but what they have stated it very fully there. I don't know what may be referred to "as other things" strictly.

Q. As "various other elements of value"?

A. As "various other elements of value."

Q. You don't pretend that there is anything else besides what you have presented here in your statement as constituting elements of value to your company?

Mr. MATHEWSON: What statement, Mr. Burr?

Mr. BURR: Well, assets, and the testimony that has been given as to their business, &c.

Mr. MATHEWSON: There is no testimony at all as to the good will of an established business, which we consider of very great value, nor yet of the franchises.

Q. The complaint at folio 75 refers to the franchises and proceeds to say "In addition to its said franchise rights, your orator is possessed of a large amount of intangible property, which constitutes an integral and important part of its said business" and then continues as I have previously read; continues to speak of the various other elements of value. Now, I want to know what those various other elements of value are and were that appear upon the books of the company, and you cannot recall them so as to specify them at this time, is that right?

A. No, not in addition to the things enumerated in the bill of complaint, I don't think of anything at the moment.

Q. In addition to those things which are specifically enumerated in the complaint you don't think of anything else that can be embraced in this term "various other elements of value?"

A. At this moment nothing else occurs to me, Mr. Burr.

880 Of course, I assume there is included everything that appears upon our books and these other intangible assets which are not valued upon our books, so far as our book records are concerned, in addition.

Adjourned to Friday, August 17th, at 1:30 P. M.

Last Exhibits:

Complainant's 100.
City's 9.
State's N.

881 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *August* 17, 1906.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Burr, Mr. Page, Mr. Gans.

882 ROBERT A. CARTER resumed the stand.

Cross-examination by Mr. BURR, Continued:

Mr. BURR: I would like to have it noted on the record that the title of the proceeding in which the rate of 80 cents per thousand cubic feet was fixed by the Gas Commission, and the decision of which by the State Commission is now here questioned, was in the matter of the complaint of Edward G. Keys and others, being upwards of 100 consumers of the Consolidated Gas Company of New York, and the complaint of R. H. & M. McGurrin and others, also being upwards of 100 consumers of the Gas Company, and the testimony read to Mr. Carter was from the papers on appeal from the order made by the Commission of Gas and Electricity of the State of New York and printed and prepared by the attorneys for the Consolidated Gas Company.

Mr. MATHEWSON: I don't know that that is entirely so, Mr. Burr. I think you questioned him as to certain answers from the record of the proceedings before the Stevens Investigating Committee, and not entirely from this record; and of course the record you refer to on appeal is one that is approved by the counsel both for the Consolidated Gas Company and for the complainants mentioned, otherwise it could not be filed.

Mr. GANS: Were not all your questions, Mr. Burr, either directed to testimony that was either taken directly before the Commission or read in evidence before the Commission?

Mr. MATHEWSON: No, he took that printed record before the Investigating Committee and asked certain questions as to that,

883 he asked whether the balance sheet as it appeared in there for June 30, 1904, was correct, and all that.

Mr. PAGE: That same balance sheet was put in evidence before the Commission.

Mr. MATHEWSON: That may be, but the question does not indi-

cate, nor is the witness' attention directed to the printed volume on appeal in that connection.

Mr. BURR: Do I understand that there is any question made as to the correctness of the testimony read by me from the printed record which I have just read?

Mr. MATHEWSON: I do not touch upon that point at all. I merely desire to correct the general statement you made at the outset, I think by inadvertence, which is not precisely accurate.

Mr. BURR: It is true that before the Gas Commission certain testimony given by Mr. Carter before the Stevens Investigating Committee was read.

Mr. MATHEWSON: Quite true.

Mr. BURR: And part of the testimony to which I called his attention yesterday as printed in these papers was evidence given by him before the Stevens Investigating Committee which was read in evidence before the State Gas Commission, and part I read from the record of the Stevens Investigating Committee itself.

Mr. MATHEWSON: Yes.

Mr. BURR: The testimony taken yesterday having been but this moment delivered and received by me, I cannot say definitely as to all the matters called for, or statements called for yesterday, but I will ask Mr. Carter to produce those statements which were
884 called for and of which he made a memorandum yesterday, I believe.

The WITNESS: My understanding was, Mr. Burr, that the production of these statements was to depend in the first place upon what statements might be prepared by the accountant of the State that might cover the same line of inquiry, and in the second place it would be subject to Mr. Heyward's scrutiny of the account as to whether he wished the statement made up or whether he was satisfied from his scrutiny that it was unnecessary. Now, since these statements were referred to in yesterday's examination, of course I have not been interviewed by Mr. Heyward nor have we gone over the subject, because he in turn desires to await the termination of the investigation by the accountant for the State before beginning to make such investigation or do such checking as he desires to do.

Mr. MATHEWSON: Yes, that is quite right. You stated, Mr. Burr, that you understood when you made this request yesterday, that this might be unnecessary in view of what information might be supplied to Mr. Heyward.

Mr. BURR: Of course you (Mr. Carter) cannot be at the office with Mr. Heyward while you are here?

A. No.

Q. And Mr. Heyward informs me that he called up to your office, but that you were so busily engaged that you could not give the attention which he thought it necessary to give to him in order to go over the books?

A. That was when?

Q. The last day he was here.

A. I think it was rather the case that Mr. Heyward wanted

to talk with me about, rather than perhaps go into the
885 books themselves and check my statements and perhaps we were interrupted so much that he did not complete what he wanted to talk about.

Q. He informed me that he has had no such opportunity as he must have to get the information desired.

A. He desired to postpone pursuing the subject until the accountant for the State has completed his work.

Mr. MATHEWSON: Which I understand is to be at the disposal of Mr. Heyward, as it may answer his purposes.

Mr. BURR: The account?

Mr. MATHEWSON: Yes.

Q. Have you produced the contracts, Mr. Carter?

A. I think they come under the same category.

Mr. MATHEWSON: No.

The WITNESS: I can have them down here in a few minutes.

The MASTER: There is no question about that. All the contracts were to be produced here to-day.

The WITNESS: I might say, Mr. BURR, that I relied upon seeing the printed record this morning so as to get from that a list of anything that was to be absolutely presented here to-day, but the delivery of the printed record has not been made yet, at least I am not aware of it.

Q. They have just been delivered this moment.

A. That would explain my failure to bring the contracts down.

Q. And the voucher record, you haven't that, have you, that is at the office, is it, that was spoken of yesterday?

A. I don't know to just what record you are referring, Mr. Burr.

886 Q. You remember we spoke of the production of the voucher record yesterday?

A. I would like to refresh my memory by referring to the testimony where reference is made to the voucher record.

By Mr. GANS:

Q. What would the voucher record signify, Mr. Carter?

A. I would say that the operating ledger was the voucher record, the permanent voucher record of the company. Every voucher which represents a disbursement is a matter of record in the operating ledger.

By Mr. BURR:

Q. You testified yesterday that you had a separate book, being a voucher record.

A. I would like to see the testimony.

By Mr. GANS:

Q. I suppose you have a filing system whereby you file away all the vouchers?

A. The vouchers themselves, not a voucher record. The vouchers themselves we do not destroy.

Q. And they are indexed in some way?
A. No, they are not indexed at all, they are simply filed in alphabetical order.
Q. Filed by month by month?
A. Yes.
Q. Filed in the departments as well as alphabetically?
A. No, filed alphabetically according to the names of the people whose names appear upon the vouchers.
Q. Whether they are for something in the street department or something at one of your plants, one of your manufacturing stations?
A. There is no separation of that kind of the vouchers.

887 By Mr. BURR:

Q. Well, have you such a book known as the voucher record?
A. No, no such book as the voucher record. That was the reason I was interested in having my statement confirmed, that I said I would produce such a book.
Q. Have you a record of your vouchers?
A. As I have stated, the vouchers are all recorded in the Operating Ledger.
Q. And you have the original vouchers filed away?
A. Yes, sir.

By Mr. GANS:

Q. Are they numbered, Mr. Carter, the vouchers?
A. No, except that each voucher bears the number of the check drawn in payment of it; that is simply as a memorandum, however.
The MASTER: Pending the arrival of these contracts we will take up something else, Mr. Burr.
Mr. BURR: Yes.
Q. Mr. Carter on Complainant's Exhibit 79 there is an item of buildings, machinery and holders, valuation of October 31st, 1905, $16,087,428.72. In what way did you itemize the valuation, what is the valuation October 31st, 1905, of the buildings alone?

Mr. MATHEWSON: Take this. See what it refers to (handing witness paper).
The WITNESS: I know perfectly well what it refers to.

A. I don't know, the record is not in any such shape as to indicate the value of the buildings alone.
Q. And does that also apply to the machinery?
888 A. The value of the machinery is included in the item $16,087,428.72.
Q. Is there no separate valuation upon these three items buildings, machinery and holders?
A. No, sir, no record showing it.
Q. Well, how then did you arrive at the figures $16,087,428.72?
A. That is the total of the value as shown by the books, or the total of the company's investment, as shown by the company's general ledger, in that property.
Q. But you have no record of the valuation of either of these items alone?

A. Separately?
Q. Separately?
A. No, not separately. We don't carry them separately in our books.

By Mr. MATHEWSON:

Q. When you say "investment" I presume you mean cost and not present value of reproduction?
A. I mean cost and not present value.

By Mr. BURR:

Q. But that amount, $16,087,428.72, is given here as the valuation on October 31st, 1905?
A. It is the book value on that date, Mr. Burr.
Q. If you so desired, could you make up an estimate of the value of the buildings alone?
A. An estimate of the book value of the buildings alone?
Mr. MATHEWSON: That would be a matter——
The WITNESS: I doubt it. It would be very, very long. It would take a long time to do it.
Mr. MATHEWSON: It does not appear on the books of the company. Would be simply an expert's opinion as to division.
The WITNESS: Yes, sir, that is all.
889 Q. Then this valuation given in Exhibit 79, this total of $16,087,428.72, is an expert opinion of yours?
A. No, sir, it is the value of the property as appears on the books and represents the company's investment, Mr. Burr.
Q. Then you have no separate account for buildings, no separate account for machinery and no separate account for holders?
A. No.
Q. Now, you have previously testified that the total cost to the company would be $10,000,000 to remove to Astoria?
A. Yes, sir, we estimate the removal will involve that loss to the company.
Q. Do you intend to remove the holders?
A. We don't. No, sir.
Q. Did you not present on May 17, 1904, a statement to the corporation counsel giving the total valuation of the gas works excepting street mains at $8,593,694.54?
A. In connection with some tax report I presume?
Q. Yes.
A. I have already testified how those figures were reached, Mr. Burr, in 1902.
Q. Never mind, Mr. Carter, I am asking you whether this is the fact, did you or did you not testify on an examination before the corporation counsel——
A. In respect to our tax report, yes, that was the figure that we had placed the value at for the purposes of that report, that we placed upon the property in January, 1902, and continued it on subsequent reports.
Q. I am speaking now specifically of May 17, 1904?
A. That is the case, Mr. Burr.

Q. And did you not obtain this by subtracting real estate $11,213,301.16 from $19,806,995.70?

A. I am not sure about that, Mr. Burr. If the testimony indicates that I——

Mr. MATHEWSON: Supposing you let him see it.

890 The WITNESS: Well, I would be willing to testify quite positively, I think.

Q. I call your attention to your testimony as it appears upon pages 821, 822 and 823, volume 2 of the Papers on Appeal from the Order made by the Commissioner of Gas and Electricity of the State of New York, as follows:

"Q. Now that land value you carry at $11,213,301.16, represents the value of the land as you took it over from the constituent companies in 1884, doesn't it, with the addition of such apparatus at cost prices as you have made since? A. That is the case, yes, sir.

Q. Has there been any substantial purchase of land by the Consolidated Gas Company since the formation of the company in 1884? A. There have been some purchases, but I would not say that they were very substantial; I do not think we have added ten per cent. to the original value.

Q. You think then that the value of the land as carried on your books to the extent of ten million dollars would represent the value at which it was taken over in 1884, and that one million dollars about has been purchased since? A. I should say that in round figures; I would not be sure of it without consulting the balance sheet, but I do not think those figures would be very far astray.

Q. Mr. Carter, in 1904 you remember being examined before the Corporation Counsel on the question of the application for revision of the taxes of the Consolidated Gas Company for that year? A. I do not recall it very distinctly; I know that I did appear before the Corporation Counsel on several occasions.

Q. And that at that time you presented—this may refresh

891 your recollection some—at that time you presented an estimate of the value of the plant that had been prepared by Mr. Bradley? A. I do not recall what testimony I gave on that occasion, I do not recollect it.

Q. I will read a little from this, beginning at page 35 of your examination, unless Mr. Mathewson wishes me to prove this document, I subpœnaed it from the tax office?

Mr. MATHEWSON: Oh, no; may I look at it just a minute and see what it is?

Senator PAGE: Certainly.

Mr. MATHEWSON: I have no doubt it is genuine.

"Q." By Mr. RUMSEY:

Q. Mr. Carter, I call your attention to the valuation of the plant which you have put in here, $8,593,694.54; is that your personal valuation? A. No, sir.

Q. What does that represent? A. The valuation placed upon the plant by the Chief Engineer.

Q. Who is he? A. Mr. William H. Bradley.

Q. Is this supposed to include all your machinery or gas tanks,

everything which constitutes the plant for the manufacture and transmission of gas? A. Yes, except the mains.

Q. Everything except the mains? A. Except the mains and what would be calssified as personal property."

Then on page 37, on redirect-examination by Mr. Platt:

"Q. Mr. Carter, Mr. Bradley has been with the company a long time, has he not? A. He has been with the company as its Chief Engineer since it consolidated in 1884; prior to that he was connected with the Municipal Gas Company works, which he
892 constructed; prior to that he was Constructing Engineer and Constructor of gas works.

Q. Mr. Bradley has been the Chief Constructor of the Consolidated Gas Company ever since the company was organized, was he not? A. Yes.

Q. Do you know whether he has been frequently called in lawsuits and by various gas companies and others as an expert to pass on the values of gas property? A. That is my understanding, although I do not know any particular instance.

Q. Don't you know that in the Bay State gas case Mr. Bradley was called as an appraiser? A. I do recall that instance now you mention it." Now, when you move your works to Astoria you are going to keep your holders here, aren't you? A. Presumably, Senator, the larger ones, at any rate.

Q. So that it will not be necessary to scrap your holders? A. I should think not.

Q. Can you give the value of the holders as scrapped? A. I think I could have it made up approximately, the cost at any rate; I could give you the cost of the holders.

Q. Have you still in your possession this statement that was made by Mr. Bradley? A. No, I have not; I do not know that it was ever made more than verbally; I do not think that there was ever any statement made up; there may have been at the time, but it would only have been in the shape of a memorandum.

Q. Is that it (showing witness paper)? A. No, Senator; that is a statement of the assessed—that might be the memorandum; it is just the same figures; I did not think there was any detail given of it.

893 Q. That statement, as you remember it, was not so separated into items that you could separate the amount that was estimated as the value of the holders in arriving at that Eight Million Five Hundred and ninety odd thousand? A. Well, yes, I do not know what was included, or how it was valued, or what the basis of it was; I do not know anything about it."

Did you so testify?

A. Yes, sir, excepting that in the first question which you quote the term "apparatus" is used instead of 'real estate."

Q. It should be "real estate" instead of "apparatus?"

A. Yes, "real estate" instead of "apparatus."

Q. And did you not before the Gas Commission testify that the discrepancy between the company's alleged real value and the tax

value, of 50 per cent. of the book value, was because you expected to dismantle plants in Manhattan?

A. I did testify that after talking the matter with Chief Bradley my recollection with respect to the method by which he arrived at the figures he gave me, was somewhat refreshed, and that to the best of my recollection, it was by that means, taking one-half of the value of the plant as representing the value of the holders, plus some scrap value of the plant which would be dismantled in connection with the removal of the Astoria.

Q. Did you not also testify before the Commission that you had omitted to charge premium account, $23,879,183.06, which amount was realized from premiums from the sale of stock above par?

A. No, sir, I did testify that by our method of charging ourselves on the books with some securities of some of the companies which we acquired, we did not show in our books the premium at which
our stocks were issued in exchange for the stock which we
894 acquired, and that the premium at which our stock was exchanged amounted in the aggregate to some twenty-three million dollars.

Q. Did you not testify regarding that as follows, on page 1628 of the papers on Appeal from order made by Commission of Gas and Electricity of the State of New York:

By Mr. MATHEWSON:

Q. Now, referring to Exhibit 177, I see that *that* the premium on capital stock is stated there as $14,322,217.95; will you say whether that represents the premium reduced to par value of the Consolidated stock issued, or whether that is really the full premium received from the Consolidated stock sold? A. It is not the full premium receiped upon actual stock issued; it excludes an amount of premium, $23,879,183.06, which was received in excess of the amount stated in the balance sheet.

By Chairman GUNNISON:

Q. Why wasn't that included? A. As a matter of bookkeeping probably, I think.

Q. Why, if you received $23,000,000 more than you have got down, what manner of bookkeeping would keep it from being entered? A. When we acquired the securities of the New Amsterdam Gas Company we issued in exchange for them our debenture bonds for the extent—I would like to look at the memorandum, I don't remember the figures exactly—to the extent of several million dollars, we will say in round figures; we redeemed those debenture bonds by issuing our capital stock at a premium, 190; and the premium instead of being shown in a stock account was credited
back against the cost of the securities, reducing the original
895 cost to the par value of the stock that was issued.

Q. What do you mean, that the investment in the properties of some of these constituent Companies was reduced by an amount equal to the premium on your own securities? A. That is the case.

Q. Then in reality these other Companies cost you whatever—was it the New Amsterdam? A. Yes, that was one particular case.

Q. Then in reality the New Amsterdam cost you some $23,000,000 in excess? A. No, in the case of the New Amsterdam Company the difference was some $3,000,000.

Q. All of the other Companies? A. All of the other Companies combined cost us $23,000,000 more than they are stated in the books, and the premium account would show that much greater.

Did you so testify?

A. Yes, sir.

Q. Now, if the proper entries had been made, according to the usual methods of bookkeeping, would not the premium account at that time have been between thirty-seven million or thirty-eight million or thereabouts?

A. I would not like to say at the moment that the method of recording these transactions was improper. In the judgment of the officials of the company, they were recorded very properly.

By Mr. MATHEWSON:

Q. If your premium had been recorded at which you issued that stock, it would make about thirty-seven million dollars, would it not?

A. Between thirty-seven and thirty-eight million dollars.

Q. You so testified to the Gas Commission, did you not?

A. I did, yes.

896 By Mr. BURR:

Q. Have you a different system of bookkeeping than the conventional methods agreed upon by accountants?

A. I am not aware that we have.

Q. Would it not be impossible for anyone not familiar with the transactions of the Consolidated Gas Company to learn from your premium account that the true amount of premium received amounted to between thirty-seven million dollars and thirty-eight million dollars?

A. Well, wherever there has been any occasion for anybody knowing it, we have endeavored to make it perfectly plain, in the testimony. In all other cases I do not know, perhaps, that it is anybody's concern.

Q. I am speaking of the manner or method of keeping the books themselves.

A. The books are kept for people perfectly familiar with the question. There are other records that plainly indicate the terms under which the securities of other companies were acquired. It is not necessary to spread it out on the books in the way you suggest.

Q. What other record would that account be kept in so that anybody could understand it?

A. Well, the record of the transaction, the purchase of these securities of the New Amsterdam Company, for instance, is recorded in the transfer department, when the debentures were issued in exchange for stock, and the record of the stock is kept as the debentures are surrendered and stock issued at a premium of $90 a share.

Those records plainly indicate the terms and conditions of exchange of our stock for the stock of other companies.

Q. Would all that appear in your stock ledger?

A. No, I do not think it would be in the stock ledger particularly. Are you referring to the Capital Stock Ledger?

Q. Yes.

A. No, there would be no particular detail there.

897 Q. Have you got any other stock ledger except the Capital Stock Ledger?

A. No. I thought possibly you were referring to other kinds of stock, such as material or supplies or something of that sort.

Q. I call your attention to the testimony of yesterday, on page 837. You answered:

"The bills that are rendered for gas manufactured for the Consolidated Gas Company by other companies are a matter of record in the operating ledger.

Q. Well, those bills would appear in the voucher record, would they not? A. Yes.

Q. That would show the amount purchased and the prices paid? A. Yes."

By that I understand you now to mean, not a separate book but the vouchers themselves?

A. The file, yes.

Q. Didn't you, as a matter of fact, sophisticate the premium account by $23,879,183.06, leaving about $14,000,000 of the $37,000,000 actually received as the apparent amount received from the premiums from the sale of them?

A. I do not know just how you use the term, Mr. Burr. It is a perfectly proper thing for the company to record upon its books as the cost to it of the securities of other companies, its capital stock at par or its capital stock at the premium at which it was exchanged, accordingly as they felt disposed. There is no rule governing it, and it was just purely a matter of judgment or preference in regard to it at the time. That is all there is to it.

Q. In other words, the books are kept to please the stockholders, not the consumers; is not that so?

A. I think that the books are kept by a very satisfactory and very efficient method.

898 Q. That is your best answer; from the standpoint of the consumer?

A. I do not know what you mean by that. It does not convey anything to my mind, that proposition.

By Mr. MATHEWSON:

Q. It does not make your assets any more or less valuable, that you acquired with this stock, does it?

A. Not at all.

Q. Before the Gas Commission, did you not contradict the estimate of Prof. Bemis, that the net earnings from 1900 to 1904, inclusive, amounted from gas alone to $24,067,225.45, and was not your own estimate the sum of $20,307,384.33?

A. I do not recall the figures exactly.

Q. On page 1726 of the record, the papers on appeal from the order of the Commission of Gas and Electricity and so forth, you were asked this question:

Q. Now, Mr. Carter, at page 1845 of the present record, Professor Bemis testifies that he finds the net earnings from gas for the last five years since 1900 were $24,067,225.45; are you able to identify those amounts or confirm them from any source? A. I am unable to do so; from the fact that he applies that amount of earnings for that period to the Capital Stock of $39,078,000, and calculates what 6 per cent. dividend would amount to, and then how much balance would be left of the earnings for that five years. I assume that he is undertaking to give the earnings from the gas business excluding income from securities; and after deducting the fixed charges, because it would be the balance that would be then applicable to the Capital Stock in the form of dividends.

Q. And you make a total of those items as you have just
899 stated the five years since 1900, $19,114,202.98? A. That is the case, although I did not give the total for the five years.

Q. Mr. Carter, Professor Bemis obtained this sum of twenty-four million and something more on page 1845, which sum you cannot find; then computed at 6 per cent. a certain amount on the Capital Stock of the Company and made a deduction showing a balance left over; are you able to find where those computations came from at all except so far as the 6 per cent. on Capital Stock is concerned? A. I find nothing else than that.

Q. And do you think that is an error in the amount that he has taken. A. The $24,067,225 is absolutely in error to the extent of over $4,000,000, between $4,000,000 and $5,000,000.

Did you so testify?

A. Yes.

Mr. MATHEWSON: If the Master please, I was about to make an objection, that this is not in regard to the period which we are covering, going back over all these schedules.

Mr. BURR: I want to say in reply to that that this testimony is the testimony upon which the finding of the Gas Commission is based.

Mr. MATHEWSON: If you want to show that, it would seem to me that you had better offer the testimony taken before the Gas Commission. I merely do not wish to waive the right to object at any time to this procedure, when it has passed too far.

Q. You have furnished here a statement purporting to give the amount of money spent in new construction on each station since 1884. I now ask you to prepare a statement giving the
900 manufacturing capacity of each station in 1884 or 1885, with a statement of how much was coal gas capacity in each station and how much was water gas capacity. If you cannot furnish that yourself I presume you can get that statement from the engineer, Mr. Bradley?

A. Well, I might get it from Mr. Bradley possibly, but he is at home sick as the result of a serious accident. I doubt whether I

could get much information from him, but if there is any way by which I can prepare that statement I will be glad to do so.

Mr. MATHEWSON: If counsel advises.

The WITNESS: If counsel advises me to do so.

Q. Will you also please prepare a statement giving the cost and capacity of each of the 44 holders mentioned in the affidavit of Mr. Bradley presented before Justice Lacombe, separating the cost of foundations, valve houses, etc., for each holder. Do you know whether the construction of the holders by the Consolidated Gas Company is the subject of open bidding, and whether the contracts are awarded to the lowest bidder?

A. That is my understanding, that that is always so. I am very sure of it.

Q. Are the bids advertised for?

A. I think not; there are not so many people connected with that class of construction that it is necessary to advertise in order to get bids. Very few people undertake contracts of the magnitude of a gas holder.

Q. Will you produce the contracts and vouchers for the construction of those holders?

Mr. MATHEWSON: What holders. The 44 holders?

Mr. BURR: Yes.

Mr. MATHEWSON: We cannot do that; it is an utter impossibility. Some of them were constructed before 1884 even. The wit-
901 ness has already testified and in the tax report it is stated that he was unable to state the cost of this apparatus because the company had no records of the cost, great parts of it.

Q. Up to what period have you the records and vouchers for the construction of those holders, or since what period?

A. Well, I should not know without examining our files, how far back our vouchers have been preserved. I have only been interested in them personally for comparatively a few years. I should have to examine our files to find out just how far back they extended.

Q. Will you examine your files for the purpose of ascertaining how far back you kept the contracts and vouchers for the construction of holders which have been constructed since 1884?

A. Since 1884?

Q. Yes. Please also furnish a statement showing the number of services in use December 31st of each year since 1884; also a statement showing the number of new services laid from January 1st, 1885, to December 31st, 1905, by sizes; also a statement showing the total cost of all these services from January 1st, 1885, to December 31st, 1905, including cost of laying, and of valves, boxes, etc., connected therewith; also a statement of interest paid yearly on the bonds and debentures or other indebtedness, and the principal sum on which such interest was paid. Can you get the average annual quotations on the bonds or debentures of the company each year since 1884, as you have previously done in the case of stock, and if so will you produce such statement?

A. It would be impossible to do that. The debenture bonds, of

which there are some outstanding at the present time, some $1,387,000, were issued in 1888. They have never been listed on the stock exchange; therefore there are no quotations published respecting them; so that with respect to those bonds it would be impossible for me to give you any information whatever.

902

Q. Now, with respect to the debentures of 1904?

A. (Continuing:) Respecting the convertible debentures issued in July, 1904, the prices at which they have been quoted on the stock exchange are a matter of public record, if counsel desires them. I have not any record of the quotations.

Q. The record of course could be procured; I did not know whether you kept a record of them yourselves.

A. No, we do not keep a record.

Q. By Complainant's Exhibit No. 90, Agency Agreement, it is provided that:

"That Consolidated Gas Company of New York hereby employs the New York Mutual Gas Light Company at and upon the terms hereinafter mentioned, to manufacture, produce and deliver for the term of five years such illuminating gas of the illuminating power required by the laws of the State of New York, as it may require during each year."

I asked you yesterday with regard to the amount of gas purchased, and you distinguished as to the gas purchased, and said it was gas manufactured under the agency agreement. You drew some distinction in that regard?

A. Yes.

Q. That is rather a distinction in terms than in substance?

A. We think there is quite a distinction. At any rate, we have agency agreements under which this gas is manufactured for us, and we prefer so to designate it.

Q. Now, does the Mutual Gaslight Company purchase its coal and oil from the same sources at which the Consolidated Gas Company purchases its coal and oil?

A. Not that I am aware of.

Q. Does it purchase its other material at the same sources at which the Consolidated Gas Company purchases its materials?

903

A. I have no knowledge that it does so.

Q. And supplies the same way?

A. The same answer.

Mr. MATHEWSON: You do not know?

The WITNESS: I do not know; I have no knowledge about it whatever.

Q. You examine their books, don't you?

A. Whose books, the Mutual Company's?

Q. Yes.

A. No, I do not have any occasion to examine their books.

Q. Let me call your attention to the terms of the agency agreement:

"The New York Mutual Gas Light Company shall, as agent for the Consolidated Gas Company of New York, and at reasonable rates,

purchase all the constituent materials and furnish the labor necessary to such manufacture, production and delivery, and employ in such manufacture, production and delivery its own plants and appliances."

Do you make any effort to ascertain as to whether the company purchases its materials at reasonable rates and pays reasonable prices?

A. We know of course at what rates they purchase their material and are satisfied that they are reasonable, but that they purchase from the same people we purchase from, we exercise no control over it, and I have no knowledge that they do purchase from the same people. I cannot say with respect to anything that they employ in manufacture.

Q. Do you examine their vouchers with regard to the purchases of coal and oil?

A. Not very frequently. We assume that their accounts are
904 properly kept. We know that they are honest people, and we do not go very rigidly into original vouchers to find out whether they are charging us more for the gas they manufacture for us than it costs them.

Q. Well, I understood you to testify yesterday that you received monthly statements from them?

A. We do.

Q. You are not satisfied with those statements alone, are you?

A. As a general thing we are satisfied with them.

Q. Let me call your attention further to the agency agreement:

"The Consolidated Gas Company of New York shall have the right to examine at any reasonable time during business hours the manufacturing record, books and bills of cost of the said constituent materials and labor, and also any other books, bills and papers containing records of the total cost of gas manufactured under the terms of this contract."

Haven't you under the provisions of the contract, as I have just read them, examined the books of the New York Mutual Gas Light Company?

Mr. MATHEWSON: You mean this witness or the complainant corporation.

Mr. BURR: I am speaking now of the complainant corporation.

A. I think such examination may have been made for the purpose of checking their figures to some extent, but that is all.

Q. This provision was put into the agency agreement so that if you questioned the statements presented, you had the right to examine the books?

A. That is the case

Q. Because it was only by an examination of the books
905 that you could get at the cost of the constituent material and labor; is not that true?

A. That is the case, yes.

Q. Now, if I have not previously asked you, and I think I have, I will ask you now to prepare a statement showing the gas received and the price paid for same under the agency agreement with each company for each month from January 1, 1904, to July 31, 1906.

Also please prepare a statement showing the cost of the gas made by the Consolidated Gas Company each month from January 1st, 1904, to July 31, 1906?

A. It would be impossible to do that. Our accounts are not even closed as of June 30th. The time of the clerks has been so employed in preparing statements for this hearing that our own work in a measure has had to be neglected, and in the absence of Mr. Brundage on account of sickness it is impossible to bring our exhibits down to that date, and I cannot undertake to do it.

Mr. MATHEWSON: As a matter of fact, if the Master please, the only statements which we have presented of the cost of gas, where we get any gas from other companies, are two, one from October 31st, 1904, to October 31st, 1905, and the other from December 31, 1904, to December 31, 1905. We have, I think, prepared somewhere a statement of the amount of gas obtained from each company per month for the nominal year, and we can add the two months of the calendar year, November and December, without great labor.

The WITNESS: Yes.

Mr. MATHEWSON: But I object to the requirement of counsel in that it covers a greater period than is necessary, and secondly because it is an unreasonable requirement in itself, in part.

906 Q. You have a record showing the cost of gas in the books of the company, have you not, somewhere?

A. Yes, it is shown in exhibits here just as it appears in the books.

Q. I want a statement showing the cost of the gas made by the Consolidated Gas Company each month from January 1, 1904, to July 31, 1906, for the same items of labor and material covered by the agency agreement, and without any allowance of ten per cent. additional or any such interest charge as is paid to some or all of the companies under the agency agreement.

A. A statement of gas made every month for the above period by the Consolidated Gas Company, January 1, 1904, to July 31, 1906? Of course we have not made any statement of operations that go back of October 31, 1904.

Mr. MATHEWSON: We shall decline to prepare such a statement on the grounds stated by the witness and by me.

The MASTER: I suppose, as already stated, you can have a statement prepared covering the period corresponding to the exhibits which you have put in evidence?

The WITNESS: Yes.

The MASTER: That is in my judgment all he can be reasonably expected to do. I do not think you can call on them to make up tabulations for you down to July 31, 1906, a period subsequent to anything that they put in on their main case. That is part of your case, if you want to show it.

Mr. BURR: That probably will be satisfactory.

The MASTER: I think he ought to give you what details you ask for, as they correspond with statements that he himself put in evidence on that head.

907 By Mr. BURR:

Q. Now in this last statement I have asked for, Mr. Carter, please use a uniform method of computing the number of feet of gas; that is, if you use the number of feet of gas made in one case, use it in the other; and if you use the number of feet of gas sold in one case, use it in the other. You have, I believe, produced the contracts for coal and oil?

A. Yes, sir.

Q. Please file a certified copy of the pay roll for the year 1905 for all the departments of the Consolidated Gas Company. Can you prepare such a certified copy, Mr. Carter?

A. Why, I will have to put that up to counsel, Mr. Burr. It means copying a thousand pay rolls.

Mr. MATHEWSON: No, we cannot do that. I don't quite understand what the purpose of the checking of the statements which were presented here showing the operating cost of the production of gas for the calendar year 1905, by the accountants, was intended to obviate, or how it was intended to shorten this proceeding if now we have got to present every item right here again, although they have checked them and found them to be correct.

The MASTER: If he wants the pay rolls, of course insofar as this item of labor is included in your main case here, he is entitled to have that and if he is not satisfied with his accountant's examination of that up there at the office, why I suppose you will have to get a truck and bring down your 1,500 pay rolls, but I certainly do not see that you are called upon to make a copy of them for his use.

Mr. MATHEWSON: It would be a vast labor.

The MASTER: You may produce them here before me and that is the end of it.

908 Mr. BURR: Well, in fact, I do not insist that they shall make the copies.

The MASTER: But you called for a certified copy.

Mr. MATHEWSON: In the street department alone the pay rolls cover over twenty pages a week.

Mr. BURR: If they do not care to present that evidence in this way, there is only one other way, and that is to examine them when brought down and put them on the record.

The MASTER: But for the purpose of saving our time I give you fair warning now I will not sit here and spend any amount of time going through details of cross-examination of fifteen hundred pay rolls.

Mr. BURR: We would not have any cross-examination probably. We would just introduce the amounts. I don't know. I couldn't tell until I saw them.

Mr. MATHEWSON: On the record will be found our offer to permit the accountants for the defendants to go to the office to check up and see whether the statements of labor, &c., on our statement of operation presented is correct or not, and we assumed they were in the process of doing that now.

Mr. GANS: Did that contemplate they were to be privileged to go to the original vouchers as well as the pay-rolls, &c.?

Mr. MATHEWSON: The stipulation is on the record, Mr. Gans.

Mr. GANS: I would like your construction of it because it is very pertinent to——

The MASTER: I certainly so understood it.

Mr. GANS: I did, too.

Mr. MATHEWSON: If you run across anything you have
909 any question about I suppose the paper can be produced and the accountants can be satisfied; is that right, Mr. Carter?

Mr. CARTER: Yes, sir; no trouble about it whatever.

Mr. MATHEWSON: When we pay men $1.50 a day I don't suppose you will want to see the voucher which they sign for that $1.50.

Mr. BURR: These offers sound pleasant, but they mean very little. The fact of the matter is as we all understand that while Mr. Carter is here every day testifying that he can not be up there with the accountants for the city or for the State. The accountants for the city say it is impossible to get an examination of the books such as they desire within the limited time that Mr. Carter can afford them, that they get a hurried and harried examination. They want a careful examination of the books and the original sources of these expenditures and receipts. If they cannot get that they want to get as nearly that as possible, by these certified statements.

The WITNESS: It is not my understanding, Mr. Burr. Mr. Heyward has been there with every opportunity to check the statements we presented with the books of the company that anybody could possibly desire.

Mr. MATHEWSON: And the opportunity is open now.

The WITNESS: It is open now.

Mr. MATHEWSON: And the State's accountants have been checking part of them.

The WITNESS: They have been, in considerable detail.
910 Mr. Heyward himself checked them in some considerable detail.

Mr. BURR: Do I understand now counsel for the complainant to state that the books of the Consolidated Gas Company are open to the examination and inspection of the accountants for the City of New York?

Mr. MATHEWSON: I think I have made the statement perfectly clear.

Mr. BURR: Well, assuming that that means that I am correct in supposing that the books of account of the Consolidated Gas Company are open to the inspection and examination of the accountants for the City of New York to verify the various statements that have been presented here, I ask Mr. Carter now to designate a time when the accountants for the City may take hold of the books for examination.

The WITNESS: Did I understand you to say accountant or accountants?

Mr. BURR: The accountants.

The WITNESS: That was all settled, it appears to me that the City and State would be represented by an accountant each. It is a matter of record in the minutes.

Mr. MATHEWSON: That is right. That is the way it appears. If you get an army of them there they would be useless.

Mr. GAN: I suggest to the Master that of course one man can go up there and by spending a certain amount of time accomplish certain results, whereas two or three men working at the same time will probably produce greater results in a shorter time.

Mr. MATHEWSON: You have two men.

911 Mr. GANS: As far as we are concerned, it does not make any difference, and so far as the State is concerned, we are satisfied with the force we have there.

The MASTER: We are filling up this record with this discussion. I have decided the question about the payroll and the rest of this discussion is academic now. As far as I can see there is no complaint on anybody's part that I have heard this far that they are not getting what they want.

Mr. GANS: There was, sir, a very radical disagreement which has just been cleared up, so the discussion was valuable because Mr. Mathewson has stated repeatedly that he did not construe this agreement to be such as to permit us to go to the original sources except as an act of courtesy, and I understand that now to-day for the first time he concedes that that agreement entered into some days ago was an agreement which entitled us to the vouchers.

Mr. MATHEWSON: I don't think I have ever said that you should be excluded from the vouchers in any items that you desired to go further into. Most of them you would not want to go into any further.

The MASTER: It was my understanding that he had the right to look at the vouchers, because the object of this examination up there was to save time, and it was conceded that if counsel put in his strict detailed proof here instead of his tabulations you would have been entitled on cross-examination to call for the original vouchers.

Mr. GANS: That was my understanding.

Mr. BURR: That was my understanding also.

Mr. MATHEWSON: And mine, too.

912 The WITNESS: Mr. Cuthbert, the accountant for the State, has been told that several times, that if there was any item there in the operating ledger that he would like to have the original voucher for I would present it to him.

Mr. GANS: On the other hand I think Senator Page and I have been told an equal number of times by Mr. Mathewson that so far as we were going beyond the face of the books we were unduly inquisitive. I would not say it was said in those terms, but that was my understanding of what Mr. Mathewson was trying to convey.

Mr. MATHEWSON: I regret you understood it so.

Mr. GANS: And if we insisted on going on with the inquiry as we were, he would prefer to have the books brought here, I understood.

Mr. MATHEWSON: You utterly misunderstood me.

The MASTER: Let us proceed with the examination.

Mr. BURR: From the statements made by counsel for the company it would appear that an examination repeatedly called for of

certain items involving the examination of numerous books is not feasible because of the multiplicity of the books that it would be necessary to examine. No two accountants could go up to the office of the Consolidated Gas Company and in a day or two satisfy themselves as to the correctness of these numerous accounts that have been presented here. What we are asking is whether we have the free and unlimited right to examine the books at the office of the company by the accountants representing the city or whether it will be necessary to ask as each statement is made that the book be produced to verify the statement made by the witness?

913 The MASTER: This has all been gone over time and again.

Mr. BURR: If it is conceded we have that right, then I will ask the counsel to designate a time when the city may take hold of the books of the Consolidated Gas Company for the purpose of such examination.

Mr. MATHEWSON: I do not understand, Mr. Master, that there has been requested or granted a free or unlimited right to go into our books, regardless of the pentinency of the inquiry.

The MASTER: No, it was expressly said that that would not be done.

Mr. BURR: It was expressly understood it should be done so far as related to the accounts presented here. That is my understanding.

The MASTER: There is no question about that. You do not draw the distinction.

Mr. BURR: Well, with that distinction I say we should have the free and unlimited right to verify and trace to their original sources every item.

The MASTER: We had this same question up with Mr. Gans and I said then there could not be a roving commission granted to the two sets of expert accountants to go up there and wander through those books. That would not be fair. But, on the other hand, if Mr. Mathewson desires to save himself the trouble and save us all the delay of bringing down cartloads of books here, he would have to give your accountants such facilities up there as would satisfy them of the correctness of the totals and figures which he introduced here by way of summary, and that involves, necessarily, if they want to look at a voucher, looking at it. Now that, it seems to me, is

914 perfectly plain and does not involve any misunderstanding, but in the way you have put your request here and in the way it was first suggested by Mr. Gans it is altogether too broad. To have this proceeding going on here from day to day and two sets of expert accountants in the office of the company under a commission to do anything they chose, without any control, suggestion or advice from anyone, that is something far beyond the scope of any judicial inquiry.

Mr. GANS: Just to get the matter defined a little bit, isn't it true, sir, that everything relating to the transactions of the company during the period covered by Exhibits 93, 94, 95 and 96, and every book, paper and voucher pertinent to the transactions during that period,

are pertinent to a cross-examination on those particular exhibits, and doesn't that come within the spirit of your ruling?

The MASTER: But it is assumed in all these things that they are to be within the bounds of reason and common sense.

Mr. GANS: I quite agree with you, sir.

The MASTER: Technically, counsel are entitled on the *prima facie* case made by the introduction of one of these statements, to examine hundreds of books and millions of vouchers going back twenty years; technically, I say; but this case has to be closed in ninety days under the equity rule——

Mr. GANS: I was not including those statements. I say having made statements on exhibits covering the nominal year and calendar year——

The MASTER: I have also assumed that counsel for cross-examining parties here are united in the desire to facilitate these proceedings and not protract them unduly.

915 Mr. BURR: That certainly is my idea.

The MASTER: And therefore it seems to me, laying down those general principles, that it ought to be possible to establish a *modus vivendi* and let those experts work as they have been doing and get all the information wanted. Now as I say, I understand that there is no Specific complaint presented here to me now. I have understood that Mr. Burr's accountant was being offered every facility he wanted, but intimated he would like to see to what extent the ground had been covered by the State's expert before he did any more. I do not understand there has been any situation presented here which requires Mr. Burr to make a demand as to the time and place or when and where he can have access to certain books. I had taken it for granted all had been going smoothly. If I am misinformed and counsel will show me the facts and exactly the occasion that arises for some further order, I will make it.

Mr. BURR: Well, with that understanding we will leave the subject for the present.

By Mr. BURR:

Q. I show you the comparative condensed balance sheet showing the assets and liabilities of the Consolidated Gas Company as of December 31st, 1904, and November 11th, 1884, and the decreases according to the books of the company as such balance sheet appears on page 8 of the report of the Joint Committee of the Senate and Assembly, dated April 29th, 1905, and ask you whether that is a correct and true statement or condensed balance sheet for that period?

A. I think I have a copy of that perhaps that I can use to
916 refer to those figures. No, I do not happen to have it. Do you ask whether it is correct? I do not know.

Q. Can you say whether that is a true statement?

A. I cannot.

Q. Will you take the trouble to verify it at a later date?

A. I will be glad to do so.

Q. You have a copy of this report?

A. Yes.

Q. I would ask you also whether the statement purporting to give the original cost of the plant of the Consolidated Gas Company is shown by the books of the constituent companies at $20,942,632.85 and the increase since 1884 as shown by the books of the Consolidated Gas Company at $9,431,198.52, making a total book cost of $30,373,831.37, as the same appears on page 17 of the report of the Joint Committee of the Senate and Assembly dated April 29th, 1905, is a true and correct statement of such actual book cost?

A. Yes, sir.

Q. As shown by——

A. No, the books of the original companies, I know nothing about them. The books of the Consolidated Company——

Mr. MATHEWSON: Just listen while the stenographer reads the question.

The STENOGRAPHER (reading as follows): I would ask you also whether the statement purporting to give the original cost of the plant of the Consolidated Gas Company as shown by the books of the constituent companies at $20,942,632.85 and the increase since 1884 as shown by the books of the Consolidated Gas Company at $9,431,198.52, making a total book cost of $30,373,831.37, as the same appears on page 17 of the report of the Joint Committee of the Senate and Assembly, dated April 29th, 1905, is a true and correct statement of such actual book cost?

Mr. MATHEWSON: Do you know?

917 The WITNESS: I know it represents the cost to the Consolidated Company of that property. That it represents the original cost of all the property? I know that it does not—I feel very sure that it does not.

By Mr. MATHEWSON:

Q. Does this amount represent the original cost to the Consolidated Company?

A. As shown in that statement?

Q. Just look at the statement?

(The witness looks at the statement held by Mr. Burr.)

A. (Addressing Mr. Burr:) This is not the statement which you showed me. You showed me a comparative balance sheet.

By Mr. BURR:

Q. I am speaking of this statement of two or three lines?

A. No, decidedly not, is my answer.

Q. Which of the items does that refer to? Does it refer to the item purporting to give the increase since 1884, as shown by the books, $9,431,198.52?

A. I don't know what it purports to be. It is not a statement that I have any knowledge of or have anything to do with the preparing of, so I don't know anything about it.

Q. A statement was prepared by you showing the increased cost of the plant of the Consolidated Company from 1884, which was presented to the Stevens Investigating Committee, isn't that so?

A. Are you referring to a comparative balance sheet of November 11, 1884, and December 31st, 1904?

Q. I am referring to this simple item here, increase since
918 1884, as shown by the company's books, $9,431,198.52, and referring to Exhibit 387 before the Stevens Investigation Committee.

Mr. MATHEWSON: Suppose you let him see it. I shall ask the witness not to answer the questions until he informs himself.

Q. I will go to something else for the moment. Can you give me a statement of the amount of gas sold to the city each year during the past ten years?

A. It is a matter of record on our books. If counsel advise to do so, I can furnish a statement.

Mr. BURR: No objection to that, is there?

Mr. MATHEWSON: What is the object in going back ten years, so far as the present inquiry as to the present cost of gas is concerned?

Mr. BURR: The object is this. I want to couple another question with that and ask him if he can tell us at what rate such gas has been supplied to the city during each year during the past ten years.

Mr. MATHEWSON: The Act of 1897 provided that gas should be supplied to the City of New York at 90 cents. The charge where gas had been metered has since the 90 cent rate was established been 90 cents, and nothing else, and nothing different. Where lamps have been supplied upon a bid and it required a statement as to what the lamp would be supplied with, including both gas and maintenance, the contracts that you have yourself will show at exactly what rate the lamps are supplied. Now that covers absolutely the whole ground, so far as I can see, doesn't it, Mr. Carter?

The WITNESS: Excepting that my recollection is that the law was 1896 and not 1897. That provided for a reduction in the
919 price of gas to the city, from $1 a thousand fixed at that time, to 90 cents, at the rate of two cents a year.

By Mr. MATHEWSON:

Q. I say at the rate fixed in the Act, it was furnished?

A. Yes, and that has been the rate charged since then. It became 90 cents in 1901, it was 98 cents in 1897, 96 cents in 1898, 94 cents in 1899, 92 cents in 1900 and 90 cents in 1901.

Q. Whatever it is, the Act itself shows?

A. The Act itself would show.

By Mr. BURR:

Q. Since 1896 then you have been supplying the City of New York at a lesser rate for the gas sold than to the general consumer?

A. As provided in that Act, yes, sir.

Q. And has your company competed to supply the City of New York for even a lesser figure during this period?

A. Not that I am aware of.

Q. Have you any means of informing yourself as to the number of lamps that are on the mains of each of the constituent companies of the Consolidated; I mean public lamps?

A. No, sir, I have not.

Q. Does the statement furnished by each company show the number of lamps lit by it. I mean the statements furnished monthly to the Consolidated Gas Company?

A. They do not, no, sir.

Q. Is there any way that you know of to ascertain how many lamps are lit by each constituent company?

A. None of them are lit by each constituent company; they are all lighted by the Consolidated Company.

Q. Well, do you know of any way by which you may inform yourself as to the number of public lamps lit by the subsidiary companies?

920 A. Why, I presume their records would show some few flat flame lamps which they supply with gas and maintain under contract with the city.

By Mr. MATHEWSON:

Q. What do you mean by subsidiary companies?

A. Well, I don't know. When he says the subsidiary companies, I presume he is referring to the companies in the City of New York other than the Consolidated Company.

By Mr. BURR:

Q. I mean the companies with whom you have agency agreements, for instance.

A. The companies with whom we have agency agreements.

By Mr. MATHEWSON:

Q. Now, will you look at that and see whether you want to correct your statement as to the cost price to the City (handing witness Chapter 385 of the Laws of 1897).

A. I would like to correct it with respect to the price charged the city under Chapter 385 of the Laws of 1897. It provides that such corporation, association, company, partnership or person shall not charge for illuminating gas for use of any such city sums to exceed per thousand cubic feet during the remainder of the year 1897, $1, during the year 1898, 97½ cents; during the year 1899, 95 cents; during the year 1900, 92½ cents, and during each year thereafter, 90 cents.

Q. In lieu of the two-cent graduation which you had in mind when you testified from memory?

A. Yes, sir.

By Mr. BURR:

Q. The number of lamps supplied and the rate charged will all appear in this account which you have stated is kept on file,

921 the Corporation of the City of New York account, will it?

A. Yes. The charge against the city will appear there. The copy of bill rendered the city would be the first source of information as to the number of lamps, etc., in which the charge is made each month.

Q. Your company has declared a dividend since this hearing started, has it not?

A. I believe it has declared a dividend of one per cent., but my attention has been so exclusively confined to this hearing that I don't know much about it.

Q. Yesterday you stated there was still competition between the companies forming the Consolidated Gas Company or between the Consolidated Gas Company and the New Amsterdam, the Standard and the Mutual?

A. Yes, sir.

Q. And I understood you also to say that the object of acquiring a controlling interest in them was to avoid competition?

A. I have no knowledge of having testified to that specifically.

Q. Well you have testified that the object in view in acquiring a controlling interest in each of those companies was because of the hostility of those companies?

A. I have no recollection of having testified to that effect.

Q. Didn't you testify in answer to Mr. Mathewson that the Consolidated invested these very large amounts of money in the securities of the electric light companies and of the gas companies because of the hostility of those companies to the interests of the Consolidated Gas Company?

A. No. I have no recollection of anything of the sort.

Mr. MATHEWSON: I asked him if they were not organized in hostility to the Consolidated Gas Company and he said they were. Not by the Consolidated Gas Company or its owners.

Q. Was it because they were organized in hostility to the
922 Consolidated Gas Company that the Consolidated Gas Company spent the vast amounts to acquire a controlling interest in them?

A. I don't know.

Q. The company that you were identified with before the Consolidated was what company?

A. The New York Gas Light Company.

Q. Was that a member of the pooling agreement which existed before November, 1884?

Mr. MATHEWSON: That is objected to as immaterial and as too far back, whether the six constituent companies were at any time members of any pooling agreement before this present company was formed.

The MASTER: I do not see that it is very material.

Mr. BURR: I don't know what view Mr. Mathewson takes of the situation, so far as that is concerned. I understood him to say some time ago that we were bound by the report of the Committee of 1885.

Mr. MATHEWSON: 1886 you refer to probably.

Mr. BURR: There were two committees; one reported in 1885 and one in 1886. However, I shall not press the question at this time.

Q. I call your attention now to Exhibit 172 before the Gas Com-

mission, being Exhibit 385 in Senate Document 30, of 1905, purporting to be a statement of the Consolidated Gas Company of New York, showing status of real estate, plant and property as shown under the following headings on the books of the company, and which was read on behalf of defendant, giving as the total for real estate, plants, mains, services, meters, meter cocks and connections, pipe and supplies, office furniture and fixtures, horses, wagons and harness, tools and implements, gas stoves, scows,
923 franchise and rights, the increase since 1884 as $9,431,198.52, and ask you if that is a correct statement from the books of the company?

Mr. MATHEWSON: On those particular items?

A. I believe that to be a correct statement of the increase in the value of those particular assets as shown by the books of the company December 31st, 1904, as compared with November 11, 1884.

Q. The total increase shown on that exhibit, being the same in amount as stated on page 15 of the report of the Joint Committee of the Senate and Assembly, $9,431,198.52?

A. The figures are the same, yes, sir.

Q. And I show you on page 776 of the Senate Document No. 47, being the report of special committee of Senate to investigate lighting companies, dated March 1st, 1886, a statement of the cost of the property of the constituent companies, the Manhattan, New York, Metropolitan, Municipal, Knickerbocker and Harlem, and ask you if the total is not $20,942,632.85, as it appears by that table printed on page 776 of the proceedings before that Committee?

Mr. MATHEWSON: I do not think that is competent evidence. I think if it is material at all it could be offered by you in evidence, if it be proper and competent evidence. I don't think it is proper, if the Master please, to ask the witness such a question from a page of a book not in evidence at all.

Mr. BURR: I ask him as secretary of the company and as formerly the controller and formerly the chief accountant whether he does not know if that was the amount at which the original cost of the
924 constitutent companies appears as shown by their books?

The MASTER: That is proper enough if he can answer.

A. I cannot answer the question because I don't know that those figures appear upon the books of the original companies, and I am very sure the figures that did appear there did not represent the cost of the property to those companies.

Q. Do you wish to be understood as saying that you know of your own knowledge that the figures which appear upon the books of the constituent companies do not represent the true cost of the property of the companies?

A. I might say that in my opinion they did not.

Q. Now, when you speak of and when you present a statement purporting to give the income derived from other companies in which the Consolidated owns stock, do you speak of moneys actually paid, for instance, during the year 1905 from these other companies?

A. What particular statement do you refer to, so that I may know what is comprised in it? I ask that because there is a certain bond interest that we credit our income account with as income which is not actually paid at the present time for reasons that I have stated previously at this hearing.

Q. In your statement for 1904 as presented to the Stevens Investigating Committee, purporting to show the income received by the Consolidated Gas Company, did you not include under income from securities owned something that was due you that you had not got, particularly in reference to the amount paid or to be paid by the United and Brush Companies.

Mr. MATHEWSON: Supposing you show him the data and
925 I think he may be able to answer. It is very difficult, I am sure, for him to do so accurately otherwise.

Mr. BURR: Well, I thought he might have some recollection about it.

Q. Will you show me the contracts?

Mr. MATHESON: What contract do you mean, Mr. Burr? There are a lot of them.

Q. You have produced certain papers here, Mr. Carter, in response to a request made by counsel for the city. Have you among them the contracts for the coal and oil of the Consolidated Gas Company for the past ten years?

A. No, sir.

Q. For what years have you produced the contracts for coal and oil?

A. I have produced the contracts for coal and oil covering the periods comprised in our statements of operations for the nominal year ending October 31, 1905, and the calendar year of 1905.

Q. Will you let me see the contracts for oil for that period?

(Paper produced and handed to counsel.)

Mr. BURR: I offer it in evidence.

(Here a discussion took place which the stenographer was directed not to take.)

Mr. MATHEWSON: I do not object to these contracts being marked in evidence. I might suggest that it is unnecessary, however, to publish them in the records which go before the whole public for the reasons which I have stated and which are obvious.

Mr. BURR: I can see no obvious reason which should prevent them from being part of the public record.

Mr. MATHEWSON: I can. I ask that we be permitted to file
926 a copy of this contract, to be compared under the direction of the Master, and to be retained by him as part of the record in the case, but that it be not copied in the minute book at length.

Mr. BURR: I object to any distinction being made in the exhibits. I may not want to use another one, but I want them printed as any ordinary exhibit.

The paper is received in evidence and marked City's Exhibit No. 10.

The MASTER: Now, if counsel cannot agree about this I shall have to make some disposition of it. Of course the original is not to be filed anyway.

Mr. MATHEWSON: I think that counsel on consultation outside of the hearing can probably arrange that. I want to add Mr. Burr, that there is another oil contract that has been omitted from the bundle sent down, which I will procure, beginning November 1st, covering oil of a higher grade, made necessary by the recent law requiring 22 candles. The higher grade is required for the winter months. We had a contract for that from November 1st, 1905. We will present that also.

Q. I observe by this paper, City's Exhibit No. 10, a letter from the Standard Oil Company of New York, signed by William P. Howe to H. E. Gawtry, President of the Consolidated Gas Company of New York, dated April 26, 1904, and attached to which is a letter dated April 27, 1904, purporting to be a copy of a letter sent by the President of the Consolidated Gas Company to William P. Howe, Esq., Assistant Treasurer of the Standard Oil Company, that the terms of payment shall be "cash as heretofore," as stated on page 2 of the letter from the Standard Oil Company of New York
927 by William P. Howe, to H. E. Gawtry, President of the Consolidated Gas Company. Do you know whether there was a contract prior to this which provided for the payment in cash of the amounts agreed upon for oil?

A. I do not know, I presume so.

Q. I understood Mr. Mathewson to say that there is a contract anterior to this.

Mr. MATHEWSON: Subsequent, not anterior.

Q. I mean subsequent. Now, is there a contract anterior to this?

A. I assume there was.

Q. Have you that here?

A. No.

Mr. MATHEWSON: This covers a period of all statements except the final two months of 1905.

The WITNESS: That is the case. I could have that telephoned for.

Mr. MATHEWSON: No; that is not necessary.

Q. Do you know anything about the manner in which this oil is delivered; where it is received, and who takes it in charge?

A. Yes, I know the manner in which it is delivered. It is delivered alongside our docks in tank boats and is pumped into our tanks.

Q. Have you oil tanks?

A. Yes.

Q. Where are they located?

A. At the various manufacturing stations.

Q. They are part of the plant at each manufacturing station?

A. They are part of the plant.

Q. Do you receive this 177 million gallons of gas oil at once, or do you draw it as you need it?

A. Draw as we need it.

Q. Do you know whether this rate of 4⅝ cents per gallon is the same rate as was paid the previous year?

A. I do not remember whether it was or not.

928 Q. I observe that there is a difference in the gravity of the oil to be supplied; one is to be of gravity not below 28 degrees. Do you know why that particular kind is required?

A. Only from hearsay. A lower grade than 28 degrees gravity would not be suitable for gas manufacture, using our apparatus; I do not know that it would be with any apparatus.

Q. There are two kinds of oil specified here; in one is 34 degrees Beaum, "or a higher gravity at our option, the other is to be of a gravity 28 degrees Beaum, or higher at our option, for which the price shall be 4.04 cents per gallon." Do you know where the higher grade is received, or are both kinds received at each station, or at special stations?

A. Both kinds are received at all stations.

Q. Is it not usual, in advertising or purchasing oil, to submit specifications as to the character of the oil required, to be supplied by the seller?

A. Well, I presume that proposition of the Standard Oil Company reflects their knowledge of what we required.

Q. Then the kind of oil required is not to be found, any of it, in the specifications submitted by your company to the Standard Oil Company, is it?

A. No, I think not; I presume that would be more or less the subject of verbal understanding, as to what the company wanted.

Q. I see this letter or contract says: "We beg leave to confirm our verbal sale to you to-day of 177 million gallons of gas oil." In that verbal sale, you think the specifications were made known to the Standard Oil Company as to what was required?

A. I have no doubt of it whatever.

Q. Do you know, as to the contract which was made prior to this, which is referred to in this present letter, whether written specifications were submitted to the Standard Oil Company or

929 whether that also was the subject of verbal arrangements?

A. I have no knowledge about it.

Q. I notice that this provides for the delivery to you in bulk by tank boats alongside of your works or alongside the works of such other gas companies in the City of New York as you may designate. Do you know whether any of this oil which is specified in this contract dated April 26th, and April 24th, 1904, was supplied to the Standard or the New Amsterdam or the Mutual by the Consolidated Gas Company?

A. I think very likely to the Standard and the New Amsterdam.

Q. Do you know at what rate it was supplied to them?

A. At the same rate as to the Consolidated Gas Company.

Q. So then in that respect these other companies did get their supplies from the same source as you got yours, as far as oil was concerned?

A. I do not know what you are referring to. If you are referring to some of my previous testimony, you were referring strictly to the

Mutual. I am referring strictly now to the Standard and the New Amsterdam.

Q. Then you do not know, or do you know whether any part of this oil agreed to be furnished under this contract was supplied to the Mutual?

A. I do not know, but my impression is that none of it was.

Mr. BURR: Then I will ask to have the question stricken out and will take your lack of information.

Q. I understand that this is the only oil contract you have to-day?

A. That is the only one that was sent down to me. There is another contract, as Mr. Mathewson has explained, which I will present at the next hearing.

930 Q. Have you the coal contracts?

A. Yes.

Q. Will you produce the contract for the time covered by the statements which you have presented?

Mr. MATHEWSON: What kind, anthracite or bituminous?

Mr. BURR: Anthracite.

Q. Do you know how much of this oil has been delivered already under this contract?

A. No, sir, I do not know.

Q. I notice in the paper which purports to be a copy of the letter written in answer to the letter from the Standard Oil Company, dated April 26th, which letter is dated April 27th, 1904, unsigned, leaving space for the president to sign:

"I would say, however, it is our understanding as expressed in the letter from Chief Engineer W. H. Bradley, under date of April 20th, to your Mr. W. H. Tilford, that we expect to receive and desire to be furnished with a uniform, homogen-ous, straight run oil, and not a product that is mixed and shows a similar gravity to a straight run oil."

Have you the letter of Mr. Bradley, referred to?

A. I do not know whether it is in my files or not. It probably is in Chief Bradley's own letter file. I presume it has been preserved.

Q. That is part of this contract?

A. Not necessarily; part of some correspondence, relative to the grade of oil that the company required or preferred to use, between the parties referred to. I do not think it is a part of the contract necessarily, although reference is made to the correspondence.

Q. I will ask you to produce that letter, the letter of Mr. Bradley under date of April 20, to W. H. Tilford, in reference to the kind of oil to be supplied under the contract of April 26, 1904,

931 between the Standard Oil Company of New York and the Consolidated Gas Company.

A. I will be glad to do so if I can find it.

Q. You have produced the contracts for coal, Mr. Carter, and the paper you hand me now is a contract for anthracite or bituminous?

A. Anthracite.

Mr. BURR: I offer that in evidence.

Received in evidence and marked City's Exhibit No. 11.

Mr. MATHEWSON: Before you proceed to examine on that I want to present something for the discretion of the Master and your courtesy and discretion. You will perceive that in regard to these contracts like the Standard, marked 118-A-2, for instance—those numbers were given by the Gas Commission to the exhibits and they were referred to in questions by their numbers, not by the name of the contractors; the reason for that was, particularly in regard to these coal contracts, and also other contracts where we have several dealers, that the dealers compare; they know pretty well who are dealing, and the result, as I have said before, would be very seriously to embarrass us.

(Here Mr. Mathewson made a statement which the stenographer was directed not to take.)

Mr. BURR: Am I to understand, Mr. Mathewson, that your statements would apply to every case in any court, where any company which was a large consumer of ice or coal or oil was interested, that the contracts would be treated differently from any other exhibit in the case, if they were offered in evidence?

Mr. MATHEWSON: They are constantly, in my experience,
932 according to the discretion and courtesy of counsel. I will say that we have no objection to filing complete copies here with the Master and having them used by you in the process of checking, or your cross-examination, or anything else, as fully as possible, so far as testing your case is concerned, but I do ask that the names of contractors and the price of each individual contractor be not spread on the public record.

The MASTER: I do not see that there is any useful purpose to be served by spreading the names of the contractors and their prices on the public record. I think it would be a very proper thing to assent to Mr. Mathewson's request, if you are so advised. As I understand it, his position would naturally be that because the companies were paying too high prices for their supplies, or the fact that they got some of them cheaply, would not hurt them; but, of course, if he insists for any reason on having this exhibit treated like any ordinary exhibit and marked and put on the files, I do not see that I have any discretion in the matter.

Mr. MATHEWSON: In view of any decision here, it is part of the record; it merely is not printed, so that everybody can read it; that is all. That source was pursued and found to be perfectly satisfactory before the Commission.

Mr. GANS: How would it do to have it printed so that we can have it to read, with the names left blank, and, if you choose, with the amounts left blank, so that for our own purposes—I mean counsel—we could put in the names and amounts, and the Master could insert them in his copy for the benefit of the Court.

Mr. MATHEWSON: I will file a complete copy with the
933 Master here, so that you can refer to it, and it can be verified under the Master's directions.

Mr. BURR: Whatever I may conclude hereafter, I am not in a position to make any bargain with you on that at this moment. I

have a public position which I do not intend to jeopardize in any way by making such a concession. If I alone were concerned it would be a different matter.

Mr. MATHEWSON: But whether we pay $3.50 for coal, and whether it is from James Johnson, or John Jackson, does not make any difference, and you can compare it with the market prices if you think it is too high.

Mr. BURR: In my opinion the Consolidated Gas Company does not occupy any better position here than James Jones & Company, and I do not think they should be specialized to receive any better treatment.

Mr. MATHEWSON: Nor any worse treatment. And if I should present the same proposition, appearing as counsel for James Jones & Company, I should expect it would be assented to by counsel, and accepted as cheerfully as it was by Senator Page and Mr. Jackson.

Mr. BURR: I have concluded to offer this paper in evidence. You ask me in regard to that to make some bargain to keep it off of the record. I cannot do that at this time. I do not see any good purpose to be served by it.

By Mr. BURR:

Q. I see this document for coal, dated March 8th, 1904, reads "as per our conversation with you over telephone to-day, we beg to offer you twenty thousand tons of Beaver Meadow broken coal." The point I want to ask you about, Mr. Carter, is whether you ad-
934 vertised for bids for coal, or whether as apparently in this case there were no specifications submitted or advertised for; and it is the result of a verbal understanding between an officer of your company and an officer of some other company?

A. I don't think this exactly appears, Mr. Burr. My information is, my impression is, that the various coal companies that are in a position to fill our orders for coal, to our requirements, are all given an opportunity to present their bids for such supply, and those figures are convassed and I presume that there is more or less conversation at longer close range about them, and finally the contracts are made. I don't think there is any advertising for bids, however.

Q. Do you know if this contract of March 8th, 1904, is a continuation of a prior contract with the same people?

A. I have no knowledge that it is, unless it is plainly stated there. If it is a continuation of a prior contract I think the reference would be made.

Q. I see that reference was made——

A. Replying to your inquiries——

Q. What former contract did you have with these people for a prior supply of coal?

A. It was probably a prior contract.

By Mr. MATHEWSON:

Q. All you know is what the letter says?

A. Yes, sir.

By Mr. BURR:

Q. You have no knowledge about it yourself?
A. Nothing more than what is stated there.
Q. This letter of March 8th, 1904, has attached to it a copy of a letter of the Vice-President of your company, dated March
935 17, 1904, also letter acknowledging the receipt, dated March 18, 1904, acknowledging the receipt of the letter of the Vice-President, dated March 17th. Do you know whether any part of this coal was furnished to the subsidiary companies or the gas companies in which the Consolidated has a stock interest or owns stock?
A. I don't know, Mr. Burr.
Q. Do you know whether any was supplied to the New Amsterdam or the Mutual or the Standard?
A. I don't know.

By Mr. GANS:

Q. Otherwise there would be an item of that charge on your books?
A. No.
Q. If it were, would there be a charge on your books?
A. There would be.

By Mr. MATHEWSON:

Q. On whose books?
A. On our books against the other company. No, it would be billed by the coal company direct.

By Mr. GANS:

Q. Under what contract?
A. Under that contract.

By Mr. BURR:

Q. And would that be the same way with oil?
A. Precisely.
Q. So that you merely direct the delivery of the coal and the oil under these contracts to other companies without having them run through your books at all?
A. That would be the case.
Q. But you would keep track of it on the books, of the total of 177 million gallons of oil, for instance, wouldn't you?
936 A. We would be advised by the other companies of the delivery of oil and would record it.
Q. Then it would appear in some place in your records, what amount they had received of the coal or oil?
A. Yes, it would.

By Mr. GANS:

Q. Don't you keep a purchase book of some sort in which entries of that kind are made?
A. The purchase books would not record purchases made by other companies, Mr. Gans.

By Mr. BURR:

Q. I notice, Mr. Carter, that on Plaintiff's Exhibit 11, is stamped "Executive Committee, approved, March 15, 1904." Does that mean that this was taken up for consideration by the Executive Committee and formally approved by them and the seal of their approval stamped upon it?

A. I should presume so.

Q. Are you Secretary of the Executive Committee?

A. No, sir.

Q. Who is?

A. I think that the Chairman of the Executive Committee acts as Secretary, that is, he records what is done and signs the minutes.

Q. Does the Executive Committee sit every week or every day?

A. Yes, sir, every week.

Q. How often does the Board of Directors sit?

A. Monthly.

Q. What day of the week does the Executive Committee sit?

A. Unless it falls on a holiday, it sits on Tuesday.

Q. Every Tuesday?

A. Every Tuesday, yes, sir.

Q. And the Board of Directors sit on what day of the month?

A. The Thursday preceding the last Friday of each month.

Q. Do you know anything as to the distinctive qualities between the Beaver Meadow broken coal and the Cross Creek broken coal?

937

A. No, sir.

Q. And do you know whether one has a greater capacity for the better manufacture of gas than the other?

A. No, sir.

Q. Who selects the coal, the kind of coal?

A. Why, I think that most of the coal that is purchased is selected by the officers upon possible tests made at the stations of coal, that is my impression.

Q. Well, you know, as a man who has been identified with a gas company for a great many years, that one coal differs from another as to the resultant qualities in making gas, one makes a better gas with a less amount of coal than the other, doesn't it?

A. Coals differ.

Q. In that respect——

A. Are you referring to gas making coal, when you refer to the Beaver?

Q. I am speaking of gas making coal now.

A. Yes, they do differ some.

Q. This coal is used for the furnaces, isn't it?

A. No, sir, that is used for the generators.

Q. The generator.

A. Yes, sir.

Mr. MATHEWSON: That wouldn't be called gas making coal.

The WITNESS: No, we wouldn't call it gas making coal.

Q. What would you call it?

A. Fuel coal.

My Mr. MATHEWSON:

Q. The gas making coal is bituminous coal?
A. Yes, sir.
Q. And anthracite is not known as gas making coal?
A. No, sir.

By Mr. BURR:

Q. Is this coal delivered at once or is it delivered as you need it. Do you take it into your yards immediately after you order
938 it?
A. It is delivered as we require it.
Q. Delivered as required?
A. Yes.
Q. Have you a yard which is capable of holding 40,000 tons of coal?
A. I wouldn't like to testify as to the capacities of our yards, I don't know what they are. I know we don't pretend to make a contract for the delivery of coal and have it delivered at once upon the execution of the contract.
Q. This coal was to be delivered in cargoes of 500, 600, or 700 tons alongside the different works in the city of New York. Does this price embrace the price of delivery at your works, do you know. It is silent upon that subject in the contract?
A. My information is that it does.
Q. The rate given here embraces the entire cost up to its arrival at your different works, is that so?
A. On our docks.
Q. On your docks?
A. Yes, sir.
Q. Have you any other contracts for the same kind of coal?
A. Yes, sir.

(Witness hands Mr. Burr a paper.)
Mr. BURR: I offer this in evidence.
Received and marked City's Exhibit No. 12, August 17, 1906.

Q. This contract marked "City's Exhibit 12" also seems to be the result of a verbal arrangement, and was not the result of competitive bidding. Have you any knowledge on the subject, Mr. Carter, as to whether on or about March 15th, 1904, there was any public bidding or any competitive bidding for the supply of coal called for by this contract?
A. Oh, yes, I am sure there was a great deal of competitive bidding every year about the times we make our coal contracts for the supply of coal.
Q. Who does the competitive work. How do you manage to get it, how do you manage to get the competitive bids?
A. Why, we cannot get away from it, they would break
939 our doors down to get in and compete if we didn't offer them facilities for doing so.
Q. This contract appears to have been made up of four papers, one dated March 15, 1904, the other a letter to Mr. Cawtry, the vice-

president of the Consolidated Gas Company, signed by J. H. Abbott, sales agent, another dated March 16, from the same to the same, another dated March 17, purporting to be a copy of a letter from the vice-president of the Consolidated to J. H. Abbott, sales agent; another March 24, 1904, acknowledging receipt of a letter from Louis B. Gawtry of the 23d day of March, which letter does not appear to form part of this contract; the other is a paper purporting to be a copy of a letter from Mr. Gawtry to J. H. Abbott, sales agent, dated December 88, 1904. In this latter paper the statement is made, "This is to confirm our verbal agreement made with you December 6 less the deducting of 6,000 tons," and refers to the details of the shipment being taken up by Mr. A. M. Smith as heretofore. Who is Mr. A. M. Smith?

A. One of the engineers in the general office.

Q. This also appears to have been approved by the executive committee March 15, 1904. Has all that coal been delivered, do you know?

A. I don't know, Mr. Burr, no, sir.

Q. This contract calls for 86,000 tons. Do you know how much of it has been delivered?

A. No, sir.

Q. What other contracts have you?

(Witness produces another paper and hands same to Mr. Burr.)

Mr. BURR: I offer this in exidence.

Received and marked "City's Exhibit 13, August 17, 1906."

Mr. BURR: This contract consists of two papers, one dated March 15, 1904, and a letter to Louis B. Gawtry, vice-president,
940 from the seller. The other purporting to be a copy of a letter dated March 17, 1904, from the vice-president to the seller and the other dated March 18, 1904, accepting the offer. Do you know if any part of that coal was delivered to the subsidiary companies, or to the Standard, the New Amsterdam or the Mutual?

A. No, I don't know, Mr. Burr, whether any of it was delivered or not.

Mr. BURR: This is a contract for 50,000 tons.

Q. Have you any other contracts, Mr. Carter?

(Witness hands Mr. Burr a paper.)

Mr. BURR: I offer that paper in evidence.

Received and marked City's Exhibit 14, August 17, 1906.

Mr. BURR: This contract is dated March 16th, 1904, and consists of a letter purporting to be written by the seller to the vice-president of the Consolidated Gas Company stating the terms and conditions for the sale and delivery of 80,000 tons of Wilkesbarre broken coal; also a second paper dated March 17, 1904, purporting to be a copy of a letter from the vice-president of the Consolidated to the seller agreeing to the purchase of 80,000 tons of Wilkesbarre broken coal.

Q. What other coal contracts have you, Mr. Carter?

(Witness hands Mr. Burr another paper.)

Mr. BURR: I offer this in evidence.

Received and marked City's Exhibit 15, August 17, 1906.

941 & 942 Mr. BURR: This contract consists of a letter from the seller to the vice-president of the Consolidated Gas Company offering 40,000 tons of coal to be shipped between April 1st, 1905, and April 1st, 1906, at a price stated; stating further "his offer does not include shipments to Astoria, but we would like to be advised as to whether you would wish any deliveries to be made to that point during the coming year." The second letter, dated March 25th, 1905, from L. B. Gawty, Vice-President of the Consolidated Gas Company, to the selling agent. In the second letter, dated March 25th, 1905, it is stated "they" (meaning the owners of the coal) "make a concession to you by paying the same," then they state the price in force for points outside of these towing limits at 115th Street and 132d Street and Ravenswood, and they can make no less rates than above quoted. The third paper purports to be a copy of a letter from L. B. Gawtry, Vice-President, to the owners of the coal, addressed to their selling agents, and agreeing to purchase during the year ending March 31st, 1906, 40,000 tons of Old Company's Lehigh broken coal at price stated per gross ton alongside any of our docks, except those that are at Astoria; and another paper, a fourth paper, dated April 6th, 1905, being a letter from the selling agent of the owners of the coal, addressed to Louis B. Gawtry, Vice-President, acknowledging receipt of the letter of April 5th and informing the Consolidated Gas Company that their order for 40,000 tons of coal had been accepted.

Adjourned to Monday, August 20th, 1906, at 1:30 P. M.

Last Exhibits:

Complainant's 100.
State's N.
City's 15.

943 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, MONDAY, *August 20th*, 1906—1:30 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Burr, Mr. Page, Mr. Gans.

944 Mr. BURR: There is a correction I want to make on page 763. The question as it is written here is, "Do you know

whether there was any variation in the rates of exchange, or was it equal with that company?" It should read "with each company."

Also on page 768, the question as it reads is, "Do you know as a matter of fact whether the contract which was made by the Welsbach Company for the Borough of the Bronx was signed and taken over by your company for that year?" It should be "assigned to and taken over."

Also on page 782.

The MASTER: Unless these are vital to your cross-examination, Mr. Burr, I suggest that you leave the question of making corrections to some time outside of the hearing.

Mr. BURR: The question on page 782 reads, "We left off at the time of the rate cutting or the rate war between the companies, and I understood you to say that when in 1900 that cutting ceased there was no longer any trouble between the gas companies and the City of New York." It should be "between the gas companies and the Consolidated Company."

Also page 804 I am made to say "I think the mind of the Court should be fully informed upon this quite large item of ten cents which is charged up against each ten thousand cubic feet of gas." It should be "against each one thousand cubic feet of gas."

ROBERT A. CARTER resumes the stand.

Cross-examination by Mr. BURR continued:

945 Q. When we left off at the last hearing I was asking you with regard to the coal contracts, and the last contract that was offered in evidence is City's Exhibit 15. What other contracts have you produced.

(Witness produces paper and hands same to Mr. Burr.)

Mr. BURR: I offer that paper in evidence.

Received in evidence and marked City's Exhibit 16, August 20th, 1906.

Mr. BURR: This is a communication from the seller to the Vice-President of the Consolidated Gas Company dated March 29th, 1904, referring to a letter of Ernest S. Greene, Manager, dated March 17th and reads "Confirming my telephone communication of this morning I beg to advise that I desire to reduce my bid on your business to $3.10 per ton of 2,240 pounds alongside New York Harbor; all other terms being in accordance with my letter of March 17th last." Copy of letter from Vice-President Gawtry to the seller dated April 7th, 1904, acknowledging the receipt of letters of March 17th and 29th offering to sell and deliver to us 50,000 tons of three-fourths screened gas coal which we agree to purchase from you during the — ending March 31st, 1905, the price of this coal to be $3.10 per ton of 2,240 pounds delivered along side our docks in such monthly quantities as we might elect. This coal to be as far as possible from your — Mines, and is to be purchased subject to the agreements in your letters of April 29th, 1903 and March 17th, 1904, and March 29th, 1904." Letter dated April 8th, 1904, from the Manager of the seller to the Vice-President of the Consolidated Gas Com-

946 pany confirming the purchase from the seller of 50,000 tons of three-fourth screened gas coal to cost you $3.10 per ton of 2,240 pounds, all other terms being — accordance with my tellers to you under date of April 29th, 1903, March 7th, 1904, March 29th, 1904. The copy of letter signed Ernest S. Greene, Manager, dated March 17th, 1904, to L. B. Gawtry, Vice-President of the Consolidated Gas Company, confirming price $3.20 per ton of 2,240 pounds, alongside New York Harbor for 50,000 tons of three-fourths gas coal. All other terms being in accordance with our present agreement as covered by my letter of April 29th, 1903, and your acknowledgement of May 1st, 1903.

Q. Have you produced any of the letters that are referred to in any of these communications that I have just read, Mr. Carter?

A. If they are not presented with the papers that you have read, why, I have no knowledge of them.

Q. That contract appears to have been based upon communications which are referred to and which are not made part of this contract as it is presented here?

A. I dare say, possibly here, the first letter refers to the letter of March 17th, that is here, the second letter refers to the same letter of March 17th, which is attached hereto. The letter dated April 7th refers to letters of April 29th, 1903, March 17th, 1904, and March 29th, 1904, respecting the first of these letters, April 29th, 1903, it would probably be attached to the previous contract, and would have no particular bearing upon this except that some paragraph in a letter used in the previous contract has been referred to in the correspondence in this contract, that letter can be produced if you want it.

Q. Will you produce it?

947 A. The other one dated March 17th, 1904, is this letter which is referred to very frequently, attached to this correspondence. I do not find any letter—yes, the letter of March 29th, 1904, is also attached here.

By Mr. MATHEWSON:

Q. Now, what about that of April?

A. The only missing letter is that dated April 29, 1903, which is unquestionably attached to the contract for the preceding year. Do I understand you would like to see that letter?

By Mr. BURR:

Q. I would like to see that letter.

A. I would be glad to produce it.

Q. There are two letters that are referred to in this contract which are not attached, one is the letter of April 29, 1903, and the other of May 1, 1903. If you will be good enough to produce those——

Mr. MATHEWSON: This is Exhibit 16?

Mr. BURR: Yes.

The WITNESS: They both have reference to the 1903 contract, and would be attached to it.

Q. And that contract is stamped "Approved by the Executive Committee," and was approved by the executive committee?
A. Which are you referring to, the contract for the present year?
Q. Yes.
A. Yes, sir.
Q. Have you any other coal contracts?

(The witness hands Mr. Burr a paper.)
Mr. BURR: I offer this contract in evidence.
Received in evidence marked City's Exhibit 17, August 20, 1906.

Mr. BURR: This contract consists of a letter dated March
948 16, 1905, from the seller to L. B. Gawtry, Vice-President of the Consolidated Gas Company, in which the seller states that "We will deliver 200,000 tons of our broken —, such as you had last year, to your various stations at $4.40 per gross ton alongside in such quantities per month as you may designate, dividing it as equally as you can so that you always have stock on hand in case of an accident; so we will sell you the coal at $4.20 per gross ton f. o. b. on boats at our shipping wharf at Port Johnson, New Jersey. As I suggested to you yesterday, I think it is to your advantage to buy the coal alongside, for one reason it saves you the cost of insurance, and also because it puts on the coal company the responsibility of getting the coal alongside." Can you explain the meaning of the writing on the letter I have just read, Mr. Carter, "Ravenswood 438 A. L. G."

Mr. MATHEWSON: This is not part of the contract, is it, Mr. Carter?
The WITNESS: No, sir.

Q. I have asked you, can you explain those writings?
A. No, I cannot. I know nothing whatever about them.

Mr. BURR: Letter of April 6th, 1905, from Louis B. Gawtry, Vice-President of the Consolidated Gas Company to the seller "Confirming my conversation with you, we hereby agree to purchase from you to be delivered during the year ending March 31st, 1906, 30,000 tons of broken coal to be delivered alongside our docks in the City of New York. The price of this coal to be $4.20 per gross ton f. o. b. boats at Port Johnson, New Jersey. Letter dated April 11th 1905, from the Vice-President of the Consoli-
949 dated Gas Company to the sellers, "Kindly increase the order for broken coal sent you in my letter of April 6th, 1905, from 30,000 tons to 75,000 tons, all to be delivered under the terms and conditions as explained in my letter above referred to." Can you explain the writing upon that letter, Mr. Carter, at the bottom. Does that mean that the order was subsequently increased to 110,000 tons?
The WITNESS: Probably not, as it does not say so. I presume it means exactly what it says.
Q. Can you explain it?
A. I don't see that there is any explanation necessary. It is a memorandum. It was not a part of the contract.
Q. N. G. Company, are those the letters, Mr. Carter?

A. No, N. A.
Q. What does that mean?
A. It means New Amsterdam.
Q. N. A. Company is to order 35,000 tons direct, that making 110,000 tons for L. & W. B. Company?
A. Yes.
Q. Does that mean that 35,000 tons of this particular coal at the same price was delivered to the New Amsterdam Company?
A. I presume so from that memorandum.
Q. The other letter attached is dated September 9th, 1905, from the Vice-President of the Consolidated Gas Company to the general sales agent of the seller, modifying the contract so that the Consolidated Gas Company may receive 15,000 tons to be delivered during the months of September and October, 1905, under the terms of the contract. Letter of September 11th, 1905, from the seller to the Consolidated Gas Company, accepting the modification of the contract as proposed in the letter of the 9th inst. Letter of December 4th, 1905, from the Sales Agent to the Vice-President of the
950 Consolidated Gas Company, letter of December 6th, 1905, from the Vice-President of the Consolidated Gas Company to the Sales Agent of the seller, reading, "In answer to your letter of December 4th, 1905, we beg to say that we will take from you 10,000 tons of broken coal in addition to and under the same terms of our present contract with you. This coal to be delivered as soon as possible, and confirms the order given you verbally on the 4th inst.," and at the bottom of that letter appears a memorandum in writing "Purchased by authority given on the enclosed 12.5.05 L. B. G."
Q. Have you any other contracts, Mr. Carter?

(Witness produces paper and hands same to Mr. Burr.)
Mr. BURR: I offer this in evidence.
Received in evidence and marked "City's Exhibit 18, August 20th, 1904."

Mr. BURR: This contract consists of a letter dated March 25th, "1905," typewriting, and later on changed in pencil to "1904." Do you know anything about that change, Mr. Carter?
A. It looks to me like a correction of a typographical error.
Q. Then you believe that the date here as written, March 31st, 1905, is the proper date?
A. No, I would leave it 1904 as the correct date of the letter.

Mr. MATHEWSON: I think that must be so. Read the next letter.

Q. The letter dated March 31st, 1905, typewritten 1905 and changed to 1904 in pencil, is from the seller to the Consolidated Gas Company:
"We hereby agre- to deliver to you 25,000 tons of our gas coal, the same as previously shipped through the year, beginning
951 April 1st, 1904, and in about the line of previous schedules, at the following prices; when delivered alongside your wharves at your works in New York City proper, $3.45 (2,240 pounds); when delivered alongside of your works at Port Morris, $3.48."
There is a second paper attached to it, dated 3/31/04. Will you

explain what that paper is, a short memorandum in writing? Read it, if you please, if you can.

A. The memorandum reads:

"You are hereby authorized to make the same deductions from our prices this year on offer made you this date as you did on the contract just ending."

Q. Do you know to what deductions that memorandum refers?

A. My recollection is that it is a deduction of 25 cents a ton from the invoice price of the coal.

Q. This memorandum is addressed to L. B. Gawtry, Esq., Vice-President; do you know by whom it is signed?

A. No, I do not.

Q. Is it not signed by the same person who signed the letter of March 31st, purporting to be the signature of the Vice-President of the seller company?

A. I should say that it was, yes.

Q. And the figures in writing on that memorandum, $3.45 less 25, $.20, and $3.48 less 25, $3.23, L. B. G.; those are the initials of Mr. Gawtry to those figures?

A. Yes.

Q. And it is a fact that the coal billed and sold at $3.45 was netted at $3.20?

A. Charged in our accounts at the net amount, yes.

Q. $3.20 a ton?

A. Yes.

Q. And the coal to be delivered under this contract at $3.48 was charged at $3.23?

A. That is my understanding, yes.

952 Q. The third communication attached to this contract purports to be a copy of a letter from the Vice-President of the Consolidated Gas Company to the seller, dated April 7th, 1904:

"We hereby accept your proposition to deliver during the year ending March 31st, 1905, 25,000 tons, ¾ screened—gas coal, to be delivered in such monthly quan-ities as we may require, the price of this coal to be $3.45 per ton of 2,240 pounds when delivered alongside our docks on Manhattan Island, and $3.48 per ton when delivered alongside our dock at the foot of 138th Street, Borough of the Bronx; this coal is purchased under the same general conditions as heretofore."

The fourth letter attached to this contract is dated April 11th, 1904, to L. B. Gawtry, Vice-President of the Consolidated Gas Company, from the Vice-President of the seller company, acknowledging receipt of the letter of the 7th inst. This is in evidence as Exhibit 18. That also is stamped "Approved by the Executive Committee," and I suppose was approved by it?

The WITNESS: Yes.

Mr. BURR: I offer this contract in evidence, being an agreement dated the 31st day of May, 1905, between the seller and the Consolidated Gas Company of New York, agreeing to deliver to the Consolidated Gas Company, alongside its docks in the City of New York, 20,000 tons of ¾ screened gas coal, to be taken at said docks, during

the period beginning June 1st, 1905, and ending March 31st, 1906, at the net price of $2.90 per gross ton delivered, signed by the seller and the Consolidated Gas Company. This contract is for bituminous coal.

953 Received in evidence and marked City's Exhibit 19.

Mr. BURR: I offer this contract in evidence. It is headed "Contract for Bituminous Coal," dated the 25th of May, 1905, between the seller and the Consolidated Gas Company. The party of the first part agrees to deliver to the party of the second part, alongside of the docks of the party of the second part, thirty thousand tons of ¾ screened gas coal, during the period beginning June 1st, 1905, and ending March 31st, 1906, at the net price of $2.90 per gross ton. This contract contains the clause that the weight of said coal when delivered from time to time shall be as ascertained by the weighers of the party of the second part. It is signed by both parties to the agreement.

Received in evidence and marked "City's Exhibit No. 20."

Mr. BURR: The last exhibit and this one, No. 20, do not appear to have been approved by the Executive Committee; at least they do not appear to have been so stamped.

Q. Do you know whether they were so approved?

A. I have no doubt they were approved, although the evidence of it is missing from the contract.

Q. From that contract and also from the previous one offered in evidence, City's Exhibit 19, that is not approved by the Executive Committee, is it?

A. There is no doubt in my mind that the Executive Committee did approve of that contract either before or after it was made.

Mr. BURR: I offer this contract in evidence, being a contract or agreement dated the 22d day of May, 1905, between the seller and the Consolidated Gas Company, whereby the party of the

954 first part agrees to sell and deliver to the party of the second part alongside of the docks of the party of the second part in the City of New York, 75,000 tons of three-fourths screened gas coal, to be taken at said docks during the period beginning April 1st, 1905, and ending May 31st, 1906, at the net price of $3.10. It is signed by the party to the contract.

Received in evidence and marked City's Exhibit 21.

Q. This contract does not appear to have been approved on the face of it by the Executive Committee as the others were. Mr. Carter, have you any special knowledge on the subject of whether it was approved or not?

A. I can only say with reference to that contract—as in respect to the others—that my belief is that the contract was approved by the Executive Committee.

Q. What record is kept of the contracts approved by the Executive Committee, if any?

A. This is the record of the contract. The contract itself is its own record.

Q. Where it is not stamped approved by the Executive Committee, it does not carry that record with it, does it?

A. The record of the approval?

Q. Yes.

A. No, it does not carry it if it is not stamped on it.

Q. And you are simply expressing your belief that it was approved by the Executive Committee; you have no special knowledge on the subject of the approval of these particular contracts to which I have called your attention?

A. That is the case. I believe they were approved.

Mr. BURR: I offer this contract in evidence, being an agreement made between the seller and the Consolidated Gas Company
955 of New York whereby the party of the first part agrees to sell and deliver to the party of the second part and the party of the second part agrees to purchase 30,000 gross tons of—gas coal of 2,240 pounds each, equal in grade and quality to the sample quality of such coal recently purchased by the party of the second part from the party of the first part; to be delivered alongside of the docks of the party of the second part in the City of New York. The party of the second part hereby agrees to pay the party of the first part and the party of the first part hereby agrees to receive as full compensation for such coal the sum of $3.35 for each ton of—gas coal so delivered. This agre-ment is signed by the seller and the Consolidated Gas Company of New York by its president, and the seal of the Gas Company is at-ached by R. A. Carter, Secretary.

Received in evidence and marked City's Exhibit 22.

Mr. BURR: I offer in evidence contract made the 1st day of April, 1903, between the seller and the Consolidated Gas Company of New York whereby the party of the second part hereby agrees to

"Purchase and receive from the party of the first part upon the terms and conditions hereinafter stated, a certain quantity of three-fourths screened lump—gas coal, same to be delivered between April 1st, 1903, and April 1st, 1906, alongside the docks of the party of the second part, in the City of New York; in the year ending March 31st, 1904, 120,000 gross tons, as a minimum, and such amount in addition thereto, but not exceeding 30,000 gross tons, as the party of the second part may, by written notice given to it by the party of the first part, request; for the year ending March
956 31st, 1905, 150,000 gross tons as the minimum, and such amount in addition thereto as the party of the second part may by written notice request; for the year ending March 31st, 1906, 150,000 gross tons as the minimum, and such amount in addition thereto as the party of the second part may by written notice request. The party of the first part agrees to make shipments of the gas coal from their mines to St. George, Staten Island, and thence by lighterage to the City of New York, and deliver the same alongside the docks of the Consolidated Gas Company. The price of the coal is to be $3.50 per ton of 2,240 pounds, delivered alongside the docks of the party of the second part, as aforesaid. This price is based upon the present rates from the mines to St. George of $1.65 per ton of 2,240 pounds. Should the said freight rate ad-

vance or decline, the above price is to be advanced or lowered by adding thereto or deducting therefrom the actual advance or decline in said freight rate. This price is also based upon the mining rates fixed for the year ending March 31st, 1904, and it is understood and agreed that if there be during the continuance of this contract and subsequent to said date of March 31st, 1904, an advance or decline in the said mining rate, the price is to be advanced or lowered by adding to or deducting therefrom one and one-half times the advance or decline in the said mining rate."

This contract is signed by the seller and by the Consolidated Gas Company, and attested by R. A. Carter, Secretary.

Received in evidence and marked "City's Exhibit No. 23."

957 Q. Do you know whether this contract, Exhibit No. 23, was approved by the Executive Committee, it not having the seal of such approval stamped on it, as in the case of the other contracts?

A. My belief is that it was approved.

Q. But you have no special knowledge on the subject?

A. I believe they were approved, but I have no special knowledge on the subject.

Mr. MATHEWSON: I think every one of those contracts was approved by the Executive Committee.

Q. Calling special attention to this contract, City's Exhibit No. 23, do you know what the freight rate was during the year 1905, of this coal?

A. No, I do not.

Q. Do you know what the mining rate was during the years 1904 or 1905?

A. No, sir.

Q. Do you know whether the mining rate advanced or declined?

A. I do not.

Q. Do you know whether the freight rate advanced or declined?

A. I do not.

Mr. MATHEWSON: You have not got the whole of it. (Hands Mr. Burr another document.)

(The document produced by Mr. Mathewson consists of four papers, which were received in evidence and marked "Part of Exhibit 23.")

Q. This contract which I have been reading from, City's Exhibit 23, has attached to it four papers, one dated March 31st, 1904, purporting to be a copy of a letter from the Vice-President of the Consolidated Gas Company to the Seller, in which it is stated:

"Confirming our interview of March 31st, 1904, with your Mr. —— and Mr. ——, and in consideration of the reduc-
958 tion of the cost of mining, and for other reasons, the price of said coal to be during the year March 31st, 1905, *to be* $3.40 per gross ton alongside our docks."

Also a letter from the Seller to the Vice-President of the Consolidated Gas Company, dated April 22d, 1904, acknowledging receipt of the prior letter of March 31st.

"In confirmation of our interview of March 31st, 1904, agreeing to bill coal during the year ending March 31st, 1905, at the price of $3.40 per gross ton; this change is made upon the understanding, however, that the contract is to be intact in every respect except as to the charge (change) in price for the year mentioned."

Also copy of a letter dated May 17th, 1905, from the Vice-President, Mr. Gawtry, to the Seller.

"In accordance with the verbal agreement made with your Mr. —— and Mr. —— on May 12th, 1905, in which you agreed to modify the price specified in the contract dated April 1st, 1903, for 150,000 gross tons of gas coal to be delivered during the period, March 31st, 1905, to March 31st, 1906; all such coal shall be at the rate of $3.15 per gross ton delivered alongside the docks of the company; with the further provision that this company have an option to increase this tonnage should the needs of the company require it."

Also letter dated June 3d, 1905, from the Seller to the Vice-President of the Consolidated Gas Company, stating:

"We herewith confirm verbal understanding between you, Mr.—— and myself on the 3d ultimo, modifying the price
959 specified, so that the same shall be at the rate of $3.15 per gross ton; in no other respect, however, than the modification in price shall the terms of the agreement of April 1st, 1903, be changed or modified, and the contract shall remain wholly intact otherwise."

Mr. BURR: I offer in evidence a contract or agreement between the seller and the Consolidated Gas Company, dated the third of June, 1904, whereby the seller agrees to sell and deliver to the party of the second part, 25,000 gross tons of — ¾ screened gas coal of 2,240 pounds each, equal in grade and quality to the sample cargo of such coal recently purchased by the party of the second part. The party of the second part hereby agrees to pay to the party of the first part, and the party of the first part agrees to receive the sum of $3.06½ for each said gross ton of — ¾ screened gas coal." This agreement is executed by the seller and the Consolidated Gas Company, and the seals of both companies are attached, the seal of the Consolidated Gas Company being attested by R. A. Carter, Secretary. This contract is acknowledged by both parties to it. That is not the case with the other contracts.

Received in evidence and marked "City's Exhibit No. 24."

Q. The coal referred to in this contract is bituminous coal?

A. Yes.

Q. The contract, City's Exhibit No. 24, does not appear to have been approved by the Executive Committee?

A. The same opinion, Mr. Burr, that it has been approved.

Mr. BURR: I offer in evidence contract for bituminous
960 coal, dated the 25th day of May, 1905, between the seller and the Consolidated Gas Company. This provides for 25,000 tons of — ¾ screened gas coal to be taken at the docks of the Consolidated Gas Company, during the period beginning June 1st, 1905, and ending March 31st, 1906, at the net price of $3 per gross ton, delivered in the Borough of Manhattan, 14th and 42nd St. works,

at $3.05 per gross ton delivered in the Borough of the Bronx, Central Union works. The contract is executed by the parties, and has a letter attached dated February 8th, 1906, purporting to be a copy of a letter from the Vice-President of the Consolidated Gas Company to the seller, stating "Confirming my conversation of yesterday with you, I enclose herewith our order for 5,000 tons of — gas coal to be delivered prior to April 1st, next."

Q. This contract does not appear to have received the approval of the Executive Committee; it is not stamped?

A. My opinion is that the contract has been approved by the Executive Committee.

Received in evidence and marked "City's Exhibit No. 25."

Q. Do you know how much of this order was delivered at the Central Union Works?

A. I could not say without consulting our records how much was delivered there.

Q. Would your records show how much of this coal was delivered at the Central Union Works?

A. Yes.

Q. And your records would show, in regard to the contracts that have been up to this time offered in evidence, what part of the coal and oil was delivered to the various works?

A. Yes.

961 Q. In the City of New York?

A. Yes.

Mr. MATHEWSON: Of course, whatever was delivered to the Central Union we do not pay for and charge for.

Mr. BURR: I am going to object to statements of that kind to Mr. Carter. He can testify to that.

Mr. MATHEWSON: Mr. Carter has already testified to it.

The WITNESS: I testified to that Friday.

Mr. BURR: I object to your running a race with the testimony of the witness.

The WITNESS: Mr. Burr has asked for a record of the quantity delivered, and as I had already testified to the fact that no charge appears upon the books of the Consolidated Gas Company for coal delivered to other companies, I presumed there was no further occasion for testifying in that connection.

Mr. BURR: I know that, but I had asked you one question in regard to that subject, and I will now ask you another.

Q. How do you keep track of the receipt and disposal of these large amounts of coal that are embraced in these contracts; for instance, under this contract the delivery is made to the Central Union Works direct?

A. The Central Union Works advises us of the receipt of the coal, stating the shipper from whom it was received, the quality delivered and the date, etc., and that becomes a matter of record at the office of the Consolidateed Gas Company in connection with that particular contract, and that is the only record.

Q. And that is the case with regard to the Mutual, the Standard and the New Amsterdam?

962 A. The New Amsterdam, the Standard and the Central Union companies. I do not recall that the Mutual Company have availed themselves of any of our contracts for gas making supplies.

Q. Then there is a record in that form, showing how much coal and how much oil each of those companies received during the life of the contracts for coal and oil?

A. Yes, sir.

By Mr. MATHEWSON:

Q. How much they received under these contracts, perhaps?

A. Under the contracts, and during the life of the contract.

Q. They may receive other oil outside from other contracts?

A. They may, yes.

Mr. BURR: I object to that suggestion also.

Mr. MATHEWSON: That is not a suggestion; it is a fact, so that we may not confuse the record.

Mr. BURR: Then the witness himself will know it.

Mr. MATHEWSON: He has so testified. I asked him whether it was a fact. How does he know, or does the Consolidated Gas Company know if the Central Union make other purchases outside of these contracts of coal? They would not notify that to the Consolidated Gas Company, of course; there is no reason why they should. You will find, in the case of material for the Consolidated Gas Company, just the material that the Consolidated Gas Company uses and nothing else, and you will never find anything else, no matter how long you examine.

963 Q. That requires my asking you a question, in order to make it clear in my own mind. I understand from what you have said that if under these various contracts that have been offered in evidence, coal is shipped to the companies controlled by your company, they send a statement to your office of the amount of coal so received; is that so or not?

A. I presume you are referring to the companies, some of whose stock the Consolidated Gas Company holds?

Q. Yes.

A. With that modification in your question, I reply affirmatively.

Q. And the same applies to oil?

A. The same applies to oil, that is, deliveries made under our oil contracts; they are reported to us and noted on our record of deliveries under that contract.

Q. In other words, you have a record which shows how much coal and how much oil has been received by the Standard, the New Amsterdam and the Central Union Companies, from the amounts of coal and oil agreed to be purchased by the Consolidated under these various contracts?

A. That is the case, yes.

Q. Where is that record kept?

A. At our general office.

Q. In what book?

A. The contract book.

Q. In that contract book these various companies are charged with the amounts that they receive of coal and oil?

A. No charge made against them at all. The delivery to them under that contract is noted in it, but there is no charge in connection with it whatever, and I have testified to it often enough so that it should be perfectly understood.

Q. There is a record of the amounts received by them, without the amounts being charged against them?

A. Yes, sir.

Q. Exhibit No. 25 is not apparently approved by the Executive Committee, the stamp of your approval not being on it. Your
964 answer to all these contracts which have not that stamp applies to this one as well?

A. Yes, sir.

Mr. BURR: I offer this contract in evidence.

Received in evidencee and marked City's Exhibit No. 26.

Mr. BURR: This contract is made up of six letters; the first being letter dated March 20th, 1905, from the Sales Agent of the seller to Louis B. Gawtry, Vice-President of the Consolidated, reading as follows:

"I beg to confirm verbal quotation given you for grate coal for the "coming year beginning April 1st, namely $4.40 per gross ton, "alongside your docks, to the extent of 50,000 tons, if desired."

Letter of April 5th:

"Confirming my conversation with you during to-day, we hereby "agree to purchase from you for delivery during the year ending "March 31st, 1906, 10,000 tons of broken coal at the price of $4.40 "per gross ton, alongside your docks," addressed to the seller by the "Vice-President of the Consolidated Company."

Letter dated 4/6/05, acknowledging receipt of the former letter.

Letter dated December 5th, 1905, from the Sales Agent of the seller to the Vice-President of the Consolidated:

"Replying to your telephone inquiry, I beg to advise that we will "be pleased to increase our sale to you of grate coal to the extent of "6,000 tons, to be delivered in equal monthly proportions between "now and March 31st, 1906, at the same prices and conditions as the "previous sale of 10,000 tons."

965 Letter of December 6th, 1905, confirming the former letter.

At the bottom of the letter of December 6th is written:

"Purchased under authority given by the Executive Committee, "12/5/05. L. B. Gawtry."

Letter dated December 8th, 1905, to the Vice-President of the Consolidated from the Sales Agent, acknowledging receipt of the favor of the 6th inst.

Q. That contract appears to have been approved by the executive committee March 28, 1905, the stamp of the executive committee appearing upon the face of it?

A. Yes, sir.

Mr. MATHEWSON (handing some further papers to Mr. Burr): Those last sheets, I don't know whether you would call them part of the contract or not; they are simply an explanation of an increase of the amount, as you may see when you come to them.

Mr. BURR: I offer this contract in evidence, the three sheets at the end as well as the first ones.

Received in evidence and marked City's Exhibit 27.

Mr. BURR: This contract just marked in evidence is made up of several letters, the first dated March 21, 1905, from the seller to L. B. Gawtry, Vice-President of the Consolidated Gas Company:

"Confirming our conversation of a few days since, we propose to "furnish you with 15,000 tons of — broken coal at $4.55, and "30,000 tons of — broken coal at $4.40 alongside, consenting to "furnish guy men for delivery in cargoes of 500 or 600 or 700 tons
"alongside your different works in New York harbor through
966 "the year from April 1, 1905, to April 1, 1906."

Letter purporting to be a copy of letter from the Vice-President to the Seller, dated April 5, 1905:

"Confirming our conversation over the telephone to-day, we hereby "agree to purchase from you, for delivery at our various works on "Manhattan Island, 15,000 tons of — broken coal at $4.55 per gross "ton and 15,000 tons — pea coal at $2.45 per gross ton. The con-"ditions of this purchase are made in accordance with the terms "set forth in letter of March 21st, 1905. We to have the usual "cash discount as heretofore."

Q. I will ask you, Mr. Carter, what this coal is used for, this pea coal?

A. Boilers, I think.

Q. What is the other broken coal used for?

A. Generator fuel.

Q. Do you know what cash discount is allowed on this contract?

A. May I see all the papers, please?

Papers handed to witness.

I think the reference is to a discount for prompt payment of the bill, and nothing else. That is my impression. I will be glad to confirm that, however, and let you know.

Q. Will you make a memorandum of that, Mr. Carter, and ascertain whether it is the case or not?

A. Yes.

Q. And also if a discount was made how much it was? Now, isn't it a fact that in the case of all the contracts that I have offered in evidence and called to your special attention, discounts have been
allowed by the Seller to the Consolidated Gas Company either
967 as rebate or as discount for prompt payment in cash?

A. I think not.

Q. Well, have you any special knowledge on the subject?

A. My understanding is that there is no discount for payment unless stipulated in the contract. I will confirm that statement at the same time.

Q. As to all these other contracts?

A. As to the other contracts.

Q. Continuing with City's Exhibit 27, there is also a letter attached of April 5th, 1905, from the Seller to the Consolidated Gas Company, as follows:

"We have your telephone message of this date and enter your "order for 15,000 tons of —— broken coal at $4.55 alongside, de-

"liverable in large cargoes throughout the year from April 1st, "1905, to April 1st, 1906; also about 15,000 tons of —— pea coal "to be delivered in cargoes of 600 to 700 tons at $2.45 alongside for "shipment, all previous to September 1st, 1905."

Q. Have you any other knowledge about this contract, Mr. Carter, specially as to whether the terms were changed under this letter of April 5, 1905?

A. I think perhaps if there were, the rest of the correspondence would indicate it.

Mr. BURR: Then there is a letter of April 6th, 1905, from the Seller to the Consolidated Gas Company:

"We have yours of April 5th, with contract for 15,000 tons of "—— broken, and 15,000 tons of —— pea, and our understanding "is the same as yours, except as per our conversation over the 'phone.

"The exchange from —— pea to —— broken is predicated
968 "upon our having the broken coal for use, and you desire to "make the change."

Letter from L. B. Gawtry, Vice-President, to the General Eastern Agent of the seller:

"In accordance with your request we beg to confirm our desire "expressed verbally and substitute —— broken coal for pea coal for "our July orders."

Letter dated December 1st, 1905, from the shippers to the Consolidated Gas Company:

"L. B. Gawtry, Vice-President. Referring to our conversation of "this afternoon regarding an additional quantity of broken coal, you "may if you wish draw eight to ten thousand tons in excess of your "contract for ——, subject to the same conditions and prices. Re-"garding the additional quantity from —— company for immediate "shipment, I am unable to bring this matter to a head at the pres-"ent time. Can you not hold off on this until the 15th, when I hope "it can be brought up. I would thank you for an early reply under "personal cover." This letter is headed "Personal."

Copy of the letter from the Vice-President of the Consolidated Gas Company to the sellers, dated December 6th, 1905:

"We beg to say that we will take in excess of our present contract "with you, 10,000 tons of —— broken coal."

At the bottom of this letter appears in writing:

"Purchased under authority given by Executive Committee, 12/5/05, L. B. G."

969 Also a letter dated December 7th from the shippers to the Consolidated, to Louis B. Gawtry, Vice-President, confirming the receipt of the letter of the 6th of December.

Q. That contract appears to be stamped with the seal of approval by the executive committee, Mr. Carter?

A. Yes, sir.

Q. Do you know what rebates or discounts were allowed on that particular contract, City's Exhibit 27?

A. No, I do not. No reference is made to any rebates in the contract, as I understand, and my impression is that no rebates of any kind whatever were allowed.

Q. Well, we are trying to get the facts.

A. Well, I am going to give them, but if you are going to ask me about each one as I examine them I can only repeat that statement every time you ask me.

Q. Very well, I shall not ask you that again, with that understanding, that you are to ascertain and let us know what discounts or rebates were allowed on all these contracts for coal that have been or will be offered in evidence?

A. Yes sir, that I will do.

Mr. BURR: I offer this contract in evidence.

Received in evidence marked City's Exhibit 28.

Mr. BURR: The contract City's Exhibit 28 is embraced in several letters. The first is dated March 30, 1904, from the seller to the vice-president of the Consolidated:

"We hereby agree to confirm our verbal contract to-day by which "it is agreed that your company will take from us, and we will de- "liver to you between April 1, 1904, and April 1, 1905, 75,000 tons "of our screened —— gas coal, to be delivered as nearly in equal
"monthly quantities as may be practicable and as usual to
970 "your company, the price to be $3.35 per ton of 2,240
"pounds, delivered alongside your pier."

Stamped "Executive committee approved April 5, 1904."

Letter of April 7, 1904, purporting to be a copy of letter from the vice-president of the Consolidated to the seller, as follows:

"We hereby agree to purchase from you 70,000 tons of three- "quarter screened——gas coal. This is purchased in accordance "with your offer of March 30th, 1904. Please note that this order "is for 70,000 tons and not for 75,000 as mentioned in your letter "of March 30th."

Letter of April 9, 1904, from the seller to the vice-president of the Consolidated, acknowledging the receipt of the former letter and noting change to 70,000 tons and not for 75,000 tons, signed by the President of the Seller Coal Company.

Mr. MATHEWSON: Now, those are all the contracts for material excepting the Standard Oil Contract to be produced, and here is a contract for the residuals which you did not call for but which I had prepared.

Mr. BURR: I understand you were to produce all the contracts?

Mr. MATHEWSON: For the purchases of material?

Mr. BURR: Yes.

Mr. MATHEWSON: There it is. That is for the sale of residuals. Whether that was understood or not there it is, and here are the contracts to which it refers as continued.

Mr. BURR: I offer these letters in evidence.

Received in evidence and marked City's Exhibit 29.

Mr. BURR: The first of these two letters marked City's Ex-
971 hibit 29, is dated June 12, 1903, and purports to be a copy of a letter from H. E. Gawtry, President, to I. D. Fletcher, Vice-President of the Barrett Manufacturing Company, as follows:

"We hereby agree to renew for three years from July 1st, 1903, "the agreement with your company to purchase the coal tar, am-

"monia and oil tar produced by this company, on the same terms "and conditions as in our present contract."

A letter dated May 22d, 1903, to the Consolidated Gas Company from I. D. Fletcher, First Vice-President, as follows:

"We hereby confirm our offer to purchase from you for a period "of three years beginning the 1st of July next all of the coal tar, "ammonia and oil tar produced by the cupola process, on the same "terms and conditions as we are now paying you for these different "articles."

Q. What is meant by the oil tar produced by the cupola process, Mr. Carter?

A. Why, some people call a generator a cupola. I don't know just why.

Q. Well, it is the ordinary oil tar produced from the gas manufacture, is it?

A. That is the case, yes, sir.

Q. And these two papers that I hand you, are those the contracts referred to in the letters I have just read?

A. Yes, sir, although there is still another one, I think. Only the 42nd and the 111th Street stations are covered by this contract with respect to the coal tar. There is another contract for 14th and 18th Street stations, or there should be.

Mr. MATHEWSON: Referred to in that?

972 (Further papers are now handed to the witness.)

The WITNESS: They are complete now.

Mr. BURR: I offer these three contracts in evidence.

Received in evidence and marked City's Exhibits 29*a*, 29*b*, 29*c*.

Q. The contracts you have just handed me are dated respectively June 24th, 1898, June 27th, 1899 and July 10th, 1901; the first one dated June 24th, 1898, is between the Consolidated Gas Company, party of the first part, and the Barrett Manufacturing Company, being Exhibit No. 29*a*; the second one, Exhibit No. 29*b*, is between the Consolidated Gas Company and the National Coal Tar Company, and the third, being Exhibit No. 29*c*, is between the Consolidated Gas Company and the Barrett Manufacturing Company. Are you still selling your residuals to the Barrett Manufacturing Company under the contract of June 24th, 1898?

A. Yes, sir.

Q. The contract itself provides that it is to commence on the first day of July, 1898, at seven A. M., and to terminate on the first day of July, 1903, at seven A. M. Was there a renewal of that contract?

A. Yes, sir, you had it in your hands a few moments ago.

Q. Then this second contract with the Barrett Manufacturing Company is the continuation of the former contract?

A. No, sir, covered the same period, I guess. I am not referring to that paper that you have in your hand.

Q. But you are referring to the two letters?

A. I am referring to the two letters.

Q. Exhibit 29?

A. Yes, sir.

973 Q. This contract with the Barrett Manufacturing Company does not cover the tar produced by the distillation of naphtha. Have you a sepaarte contract for that?

A. No, we have not.

Q. How do you dispose of that?

A. The Barrett Company have been taking it.

Q. Without contract?

A. Without contract other than a verbal contract; they have been taking it under a verbal agreement. The letter from the Barrett Company marked Exhibit 29, however, practically engages them to continue for the ensuing three years to take the oil tar—and I presume that is what you are referring to—at the same price that they had been paying for it.

Q. The one is under a verbal contract and the other is under a written contract?

A. Up to the date of the letter included in Exhibit No. 29, it was a verbal contract, then it ceased to be because they made it a written contract.

By Mr. MATHEWSON:

Q. Is the oil tar and the tar which is a distillation from naphtha the same thing?

A. I don't know why we use the word naphtha at all. We are not using any naphtha and have not been for a great many years in the manufacture of gas. I should ask Mr. Burr to make that gas oil if he wanted me to answer it in respect to our present operations.

Q. I have simply read the contract, Mr. Carter, the language of the contract, which states that the tar which is produced by the distillation of naphtha is not included in the tar mentioned in this agreement?

A. At the time that contract was made in 1898, I understood you to say we possibly were using some naphtha.

Q. That was in 1898?

A. And of course with respect to that particular reference, it probably followed the form of a previous contract, which I think ran for a period of ten years.

974 Q. This contract provides for the payment to be on or before the tenth of each month of what you produce during the preceding month, as follows:

"At the rate of four cents per ton of coal carbonized for every one "cent or fraction thereof, average price obtained free on board in "New York City, per gallon of pitch and dead oil, when such aver- "age price is seven cents or less, and when the average price obtained "for pitch and dead oil exceeds seven cents per gallon, then at the "rate of four cents per ton carbonized for every one cent obtained per "gallon to and including seven cents, and at the rate of eight cents "for every one cent or fraction thereof in excess of seven cents, and "25 per cent. added in both cases, that is, whether the average price "obtained be seven cents, more or less. The sales of pitch and dead

"oil, free on board in New York City, would be the basis of the "price of tar for the same month."

And those terms you understand were continued under a letter dated June 12th, 1903, City's Exhibit 29th?

A. Yes, sir.

Q. There was no other modification whatsoever in the terms of the original contract dated June 24th, 1898?

A. No, sir.

Mr. BURR: In the contract with the National Coal Tar Company, dated the 27th day of June, the same phraseology occurs, as I have called your attention to in the former contract, as follows:

"The tar which is produced by the distillation of naphtha is not "included in the tar mentioned in this agreement. This contract
" provides for the sale and purchase of all the coal tar except-
975 "ing, however, so much thereof as the party of the first part
" may require for his own use for ordinary purposes, produced
"at its works foot of West Forty-second Street and foot of East 111th "Street, in the City of New York, during the period of four years, "commencing on the first day of July, 1899, at seven A. M., termi- "nating on the first of July, 1903, at seven A. M. And the rate of "payment to be made on or before the tenth of each month for the "tar produced during the preceding month is as follows: At the rate "of four cents per ton of coal carbonized for every one cent or frac- "tion thereof, average price obtained free on board in New York "City per gallon of pitch and dead oil, when such average price is "seven cents or less. And when the average price obtained for pitch "and dead oil exceeds seven cents per gallon, then at the rate of four "cents per ton carbonized for every one cent obtained per gallon to "and including seven cents, and at the rate of eight cents for every "one cent or fraction thereof, in excess of seven cents, and 25 per "cent. added in both cases, that is whether the average price obtained "be seven cents, more or less."

Q. Then there was another contract with the Barrett Manufacturing Company, dated July 10, 1901, for the purchase and sale of the ammoniacal liquor?

A. Yes, sir.

Q. This contract recites that for and in consideration of certain sums lawful money of the United States of America hereinafter specified to be paid by the party of the second part to the party of the first part, the party of the first part hereby covenants and agrees to deliver unto said party of the second part all the ammoniacal liquor
it shall make at any or all its stations where coal gas is manu-
976 factured for a period of two years from the first day of July, 1901, to the 30th day of July, 1903; payment shall be made by the party of the second part to the party of the first part in cash on or before the 10th day of each month at the rate of 1.27 cents per pound of sulphate of ammonia which can theoretically be obtained from said liquor, to be determined by what is known as the distillation test by neutralizing with sulphuric acid containing 93.5 per cent. formula, H^2SO^4?

A. That is the formula, yes, sir.

Q. (Reading:) The price above named is based upon the wholesale market price of sulphate of ammonia of 2¾ cents per pound, and no reduction shall be made unless the price shall fall below 2½ cents, nor shall any advance be made unless the price shall exceed three cents, in either of which events there shall be a proportionate advance or reduction as the case may be, calculated on the basis of 2¾ cents per pound. What was the average price which you received under this contract?

A. For what particular period, Mr. Burr?

Q. Well, this contract only runs from July 1, 1901, to the 30th of July, 1903. For the year 1901.

A. I shall have to consult the records and the sales to the Barrett Company for that period before I can answer that question.

Q. Now how is the ammoniacal liquor presently disposed of? Is there a continuation of this contract?

A. The contract which is marked Exhibit No. 29 covers the ammoniacal liquor as well as the coal tar.

Q. Then will you tell me what the average price was which you received from ammoniacal liquor for the year 1905?

A. Yes, sir.

Mr. MATHEWSON: Exhibit No. 94 contains the amount sold and the amount received.

977 Mr. BURR: You may answer to that effect if you wish.

A. The average price received during the year 1905 was 1.34 cents per lb. of sulphate.

Q. What average price per gallon or per ton of coal carbonized did you receive for coal tar for the same period?

A. 28.59 cents.

Q. Per ton?

A. Per ton of coal carbonized.

Q. And what price for oil tar?

A. 1.93 cents per gallon.

Mr. BURR: Now, have you that oil contract?

Mr. Mathewson hands a paper to Mr. Burr.

Mr. BURR: Will you let me have the copies of the contracts?

Mr. MATHEWSON: Yes (handing some papers to Mr. Burr).

Mr. BURR: I offer this contract in evidence.

Received in evidence and marked "City's Exhibit No. 30."

Mr. BURR: This contract is dated November 1st, 1905, and is contained in two separate papers; one a letter written to W. B. Addicks, Vice-President of the Consolidated Gas Company, from the Standard Oil Company of New York, by C. M. Higgins, as follows:

"We hereby agree to sell you 255,000,000 gallons of gas oil to be "delivered in bulk by tank boats, alongside of the works of the Con- "solidated Gas Company, at New York, or alongside the works of "such other gas companies in the City of New York as you may des- "ignate, during the two years and eight months beginning Novem- "ber 1st, 1905, and ending June 30th, 1908. Of the foregoing oil

" 40 per cent. is to be of a gravity which shall not be below 34
978 " degrees Baumé or of a higher gravity or part of it; the price
" of such oil is to be 4.875 cents per gallon; the remainder of
" the 255,000,000 gallons is to be of a gravity not below 28 degrees
" Baumé or higher or part of it, for which the price is to be 4.29
" cents per gallon, the aggregate deliveries of both quantities to be as
" stated, 255,000,000 gallons. This material is to cover your entire
" supply of liquid gas making material during the period named and
" is to be delivered and received as required by you during the said
" period as follows:

"Al- of 34 gravity or above during the months of November, De-
" cember, January, February and March of each year; and all of 28
" gravity or above during the months of March, April, May, June,
" July, August, September, October and November of each year.

"It is understood that during April, 1906, and again in April,
" 1907, you are to have the privilege of electing and notifying us
" whether during the succeeding twelve months you are to take 45
" per cent. or 50 per cent. of oil of a gravity of 34 degrees Baumé
" and continue to take 40 per cent. as heretofore specified. In the
" event of your requirement from November 1, 1905, to March 31,
" 1906, being for a greater quantity of 34 gravity oil than 18,000,000
" gallons we are to have the privilege of substituting for such excess
" an oil of a lower gravity than 34 degrees but not lower than 28
" degrees.

"The gas oil we expect to furnish will be homogenous oil and of a
" gravity as agreed upon. Notices shall be rendered and payments
" made on gallonage certified to at loading points by properly certi-
" fied New York Produce Exchange petroleum expert. The terms of
" payment shall be cash as heretofore."

979 The second is a copy of letter purporting to be signed by W. R. Addicks, dated November 1, 1905, addressed to C. M. Higgins, at the Standard Oil Company, which letter accepts the agreement to supply the liquid gas making material, in the aggregate 255,000,000 *millions,* under the terms of the letter dated November 1, 1905.

Mr. BURR: Do I understand that you are not going to leave these originals with the Master?

Mr. MATHEWSON: I am going to leave exact copies of the originals, and take the originals with me. I understand that is to be it, Mr. Master?

The MASTER: Yes.

Mr. BURR: You have got the original contract?

Mr. MATHEWSON: No trouble about that. If the Master wants them verified, under his direction I am willing to have that done at any time.

Q. Referring to City's Exhibit 30, Mr. Carter, can you tell or state now how much of these 255 million gallons of gas oil has been delivered?

A. During what period, Mr. Burr?

Q. Since November 1st, 1905.

A. To what date?

Q. Up to date.

A. No, sir, I could not possibly. Deliveries may have been made this morning that I have no knowledge of.

Q. Well, can you tell us what deliveries have been made up to the first of July?

A. I will have a statement prepared of deliveries made from the first of November to the first of July.

Q. Will that statement show to what companies the oil was delivered under this contract?

A. Yes.

Q. I am referring for the moment to City's Exhibit No. 10.

980 Mr. MATHEWSON: Do Exhibits 93 and 94 show the amount of oil that was used in the production of gas for the two years ending October 31st, 1905?

The WITNESS: They do show the quantity used in manufacture during the two years covered by this statement, the nominal year and the calendar year.

Q. After and in addition to the suggestion made by Mr. Mathewson, I want to find out where the oil was delivered under both the contracts which were offered in evidence here, one being Exhibit 10 and the other being Exhibit 20. In other words, Mr. Carter, I would like to have a statement showing how much of all the oil, the contracts for the purchase of which have been offered in evidence at the previous hearing, and to-day has been delivered at the plants of the subsidiary companies, as well as at the plants of the Consolidated, by subsidiary companies I mean the New Amsterdam, the Standard, the Mutual and the Central Union.

Mr. MATHEWSON: These contracts cover some of them three years; say from April, 1903, to April, 1906, going back a year and a half before any period in which the cost of gas is before you; and further than that does it add anything to the inquiry to find out how much coal or oil was delivered to the New Amsterdam or to the Central Union when all this is charged to the Consolidated, as has been testified to and the cost of its gas was stated before, how does the coal which they received and used affect this inquiry, providing it appears that the New Amsterdam received 100,000 tons of coal last year?

Mr. BURR: Well, if we can show you that the New Amster-

981 dam and other companies are using the same materials at the same price that the Consolidated Gas Company is doing in the manufacture of gas, and that the gas of the subsidiary companies is one price, and the price of the Consolidated is another price, both using the same materials, I think it would have some bearing upon this inquiry.

Mr. MATHEWSON: I don't think it would have any bearing. The conditions of distribution are very different.

Mr. GANS: I think it would have a marked bearing.

The MASTER: It might have some bearing, Mr. Mathewson, I will receive it.

Mr. MATHEWSON: During the periods we cover by our statements?

The MASTER: That is what I understand he wants.

Mr. BURR: During the period covered by exhibits 93 and 94?

The WITNESS: Yes, sir.

Q. And will you procure and supply the same information with regard to the oil during the same period?

A. Yes, sir.

Q. Have you any contracts with meters, or do you obtain your meters under contract?

A. No, sir.

Q. Have you contracts for the water used by you?

A. With the City?

Q. Yes.

A. No, sir.

Q. I mean to say you pay for the water you use, don't you?

A. Most decidedly, a dollar a thousand feet.

Q. Is that shown in any of these statements that you rendered here?

A. Yes, sir, Exhibits 93 and 94 show the number of gallons used and the price—no, it doesn't show the gallons, it shows the
982 cubic feet—the number of cubic feet used and the price per thousand cubic feet.

Mr. BURR: I would like to have it understood, so we may have no misunderstanding, that with regard to this book from which I read the testimony of Mr. Carter the other day, it is conceded that an appeal was taken from the order of the Gas Commission. Is it not so conceded, Mr. Mathewson?

Mr. MATHEWSON: Yes, notice of appeal was given.

Mr. BURR: And that appeal being taken from the order made by the Gas Commission on the 23rd day of February, 1906, the appeal book was made up by the attorneys for the complainant and for the Consolidated Gas Company?

Mr. MATHEWSON: Yes, sir.

Mr. BURR: That appeal book is entitled: "Papers on Appeal from Order Made by the Commission of Gas and Electricity for the State of New York," and consists of three volumes, purporting to contain all the testimony given before the Gas Commission, and all the statements submitted to the Gas Commission, and it is from this record so made up and printed that I have read the testimony of Mr. Carter, given before the Gas Commission, upon which I have examined him. Is that so understood and agreed, Mr. Mathewson?

Mr. MATHEWSON: You asked Mr. Carter certain questions reading from this record to which you have just referred, and you asked him certain other questions, referring to the record before the Stevens Committee. Whereever you read from this record to which you have just now referred, that record is the record on appeal as you have just stated.

983 Q. Now, have you produced the analysis of accounts which I have called for, Mr. Carter?

A. I do not know what you are referring to, Mr. Burr.

Q. The exhibits which were previously put in evidence were

received by me to-day, and were, I suppose, received by all of us at the same time, printed. Those are the State's Exhibits, and so marked. Well, what statements have you made up that you have been asked for?

A. Well, I have not made any statements up, Mr. Burr. All the statements that been asked for have been asked for conditionally upon Mr. Hayward requiring them. I mean the City's expert.

Q. You mean conditional upon the counsel for the City requiring them?

A. No, sir, I don't.

Mr. MATHEWSON: Mr. Burr said they might not be needed after Mr. Burr looked into the subject. That is about it, wasn't it, Mr. Burr?

The WITNESS: That was the substance of it, yes, sir.

Q. Then Mr. Hayward has not been making an examination of the books, has he?

A. As has been explained before, Mr. Burr, Mr. Hayward prefers to wait until the accountants for the State complete their scrutiny of our statement of operation as shown in Exhibits 93 and 94 before he proceeds with this inquiry.

Q. When will I get the information that I have asked for to-day. Will I get it to-morrow?

A. I can have everything ready excepting the statement showing the deliveries of coal and oil during the nominal year and the calendar year; during the nominal year ending October 31st, 1905, and the calendar year. It takes a little while to prepare those statements, possibly a day. I will endeavor, however, to have that report ready by tomorrow afternoon at 1:30.

984 Q. In your testimony at the last hearing you stated the record of the purchases of the securities of the New Amsterdam Company is recorded in the transfer department when the debentures were issued in exchange for stock. What particular department is that transfer department?

A. The stock transfer department.

Q. And who has charge of that department?

A. Mr. John B. Girard.

Q. I have asked for the pay-rolls, Mr. Carter, Have you produced the pay-rolls?

A. For what period, Mr. Burr?

Q. For the period embraced in your exhibits 93 and 94.

The MASTER: I did not understand that he was expected or required to produce any pay rolls. My understanding was, and the subject was gone into very thoroughly, that if the experts up there wanted to see any particular pay-rolls, they would have the opportunity to do so, but it was made very clear here that to bring down the pay-rolls of this establishment for the period of a year would be a useless waste of time to all of us.

Q. Have you produced the pay rolls? I asked for a certified copy of the pay rolls for a certain period.

A. No, sir.

Mr. BURR: I may not want to examine more than one or two of these pay-rolls for a certain period, but I would like to have an opportunity of looking at them. You said if he wants the pay rolls, so far as items of labor are included, in your main case, of course he is entitled to have them.

The MASTER: My recollection is that these could be and would be checked at the office of the company. That is a simple
985 matter compared with lugging them down here and taking up our time in that purely clerical work. It does seem to me that they could be verified in the company's offices without taking our time for it here.

If Mr. Burr wants some sample pay rolls for the purpose of interrogating the witness about, he has the right to them.

Mr. BURR: I haven't any idea, except a vague idea so far, from the testimony as how their pay-rolls are made up. I want to find out something about that.

The MASTER: Is there any branch or department you want to cover, Mr. Burr? Because you might indicate what it is, and it might make it easier for these gentlemen to give you what you want.

Q. On Exhibit 94, you have an item, Mr. Carter, Labor handling coal, $49,150.07.

Labor handling coke, $35,678.39.

Labor (just plain labor) $382,632.04;

And the labor embraced in expenses, $490,855.36;

And the labor involved in the item of distribution, $281,524.12;

And the expense item, $59,016.97;

And "Distribution," $31,855.34;

Also labor involved in the item "General Office," $339,999.51.

Now, can you give us the pay-rolls to show that information, or else you can make up a sumarized statement?

Mr. MATHEWSON: If you define the labor for the entire year of any single pay-roll, or any single department, but the present suggestion is virtually as broad as the original one.

986 Mr. BURR: Mr. Master, you remember what the testimony here is as to how large an amount or how large a figure labor cuts in making up the price per thousand cubic feet of gas. It is a very important inquiry in this investigation, in this case.

The MASTER: If it should appear after the State experts have finished their operations, and your expert has finished what he wants to do, that there is any reasonable ground for requiring the production of these pay-rolls, then I will entertain such an application, but I won't do it now, because I think it is unreasonable, and an unnecessary waste of time in a proceeding that has already dragged much more slowly than there is any occasion for, in my judgment.

Q. Have you made any analysis of the interest account?

A. Yes, there is an exhibit which shows such an analysis.

Q. Does that exhibit, State's Exhibit I, show all the interest received from other sources by the Consolidated Gas Company during the period of the calendar year 1905?

A. No, sir, it does not.

Q. Does it show all the interest paid out for any purpose by the Consolidated Gas Company during the calendar year 1905?

A. Yes, sir, except interest on Consumers' Deposits.

Q. Where would the account for the interest received from any other sources by the Consolidated Gas Company appear?

A. There wouldn't be any such account.

Q. I am not speaking of the account as such. I am asking where would that information appear, showing all the interest that the Consolidated Gas Company received during the calendar year 1905 and from each and every source.

A. We have made statements that include such interest as
987 we received on our investments in the securities of other companies, that is independently of dividends on stock. We have made this statement which shows the interest that we received from other sources, and that is all there is to it.

Mr. MATHEWSON: That you say is this statement you refer to?

A. State's Exhibit I.

Q. Well, you claim that both of the statements show all the interest which the Consolidated Gas Company received from each and every source during the calendar year 1905?

A. Yes, sir.

Q. And what is that other exhibit to which you refer?

Mr. MATHEWSON: I think that is 95 and 96. I don't know whether it is in 91 or not.

The WITNESS: I think it is.

Mr. MATHEWSON: 96, Exhibit 96.

The WITNESS: Exhibit 96. The item "Income from Securities Owned" includes such interest as we received on securities owned.

Q. Will you show me on Exhibit 96 the items stating all the interest received by the Consolidated Gas Company from each and every source during the year 1905?

A. The interest as such is not given separately, but as I have just testified, is included in the item "Income from securities owned."

Mr. MATHEWSON: That is to say, if you owned bonds of the Brush Company——

The WITNESS: Bonds of the Brush Company or of the Westchester Lighting Company, the interest on those bonds would be
988 included in this item "Income from securities owned." And I made for Mr. Burr a statement that I think—well, it does not cover the same period possibly.

Mr. MATHEWSON: You can easily separate them?

The WITNESS: It can be very easily separated, if you want the information, Mr. Burr.

Mr. BURR: I would like to have that statement in detail. I would like to have a statement, Mr. Carter, if you please, showing all the interest from every source from which the Consolidated Gas Company received interest during the calendar year 1905.

The WITNESS: But we have separated the interest from dividends received. Both of them are included in this item "Income from securities owned in 1906." There will be before you then all the interest which the company receives from any source.

Mr. MATHEWSON: Taken in conjunction with State's Exhibit I?

The WITNESS: Taken in conjunction with State's Exhibit I, yes, sir.

Q. You did prepare a statement, did you not, before the Gas Commission "Interest on Bonded Debt"? Do you recall that, Mr. Carter?

A. I think quite likely.

Q. At page 886 of the printed papers on appeal from the order made by the Commission of Gas and Electricity of the State of New York, Volume 2, referring to such exhibit showing interest on bonded debt, you were asked by Mr. Mathewson:

"Q. I see the item 'Interest on New Amsterdam Construction, $56,132.72.' Will you explain what that Item relates to? A. It is a segregation of the amount paid the New Amster-
989 dam Gas Company for gas manufactured by them for the Consolidated Company during that year. Represents an amount charged the Consolidated Company in connection with that transaction for interest on additional plant constructed by them at Astoria, in connection with the supply of gas to us."

Q. Did you so testify?

A. May I see the statement?

Q. You mean the book?

A. I mean the book in which the statement appears.

Q. I hand you the book (Book handed the witness).

A. I did so testify.

Q. Mr. Mathewson continues:

"Q. You mean at Ravenswood? A. At Ravenswood, I should say, and at that time was treated as interest rather than a gas cost; it is now included in the price paid them, or the amount paid them for the gas made for us."

"Q. In other words, they added to their plant for the purpose of enabling them to manufacture for you the amount of gas which you required, is that correct? A. That is the case, yes. Q. And the interest on that investment by them to this sum which has been mentioned? A. Yes"——

Mr. MATHEWSON: Was added?

Q. And the interest on the investment by them was added to this sum which has been mentioned?

Mr. MATHEWSON: That is paid under the agency agreement.

Mr. GANS: Is it included in these exhibits we have here?

Mr. MATHEWSON: I don't remember what exhibits you have.

990 Q. Continuing:

"Q. And you paid that as part of the cost of gas delivered to you? A. Exactly, yes, sir. Q. Instead of adding it to the cost of gas which they delivered to you in some other form? A. That is the case, it was a part of the amount that we paid them for the gas that they made for us. Q. And it is no longer carried in that shape? A. Not in identically that shape."

Did you so testify?

A. Substantially. I don't know why I should have said identically.

Mr. MATHEWSON: He said not identically.
The WITNESS: Not identically in the shape, not in that shape.

By Mr. BURR:

Q. Your answer is given here as "Not in identically that shape." Is that your testimony?
A. Well, it stands.
Q. Did you so testify?
A. I unquestionably did so testify.
Q. What shape is it carried in?
A. It is charged to the cost of the gas manufactured for us by other companies under the agency agreement. May I just amend that, by the New Amsterdam, made for us by the New Amsterdam under the agency agreement.
Q. And does that also refer to the other companies? Are they treated in the same way?
A. The other companies do not happen to have a similar charge against us.
Mr. GANS: May I ask, or will you ask, "Is that charge included in the total which appears on Exhibits No. 93 and 94?"
991 A. It is included.
Q. As money paid under the agency agreement?
A. It is.
Mr. MATHEWSON: Not as money paid under the agency agreement.
Mr. GANS: I asked that.
Mr. MATHEWSON: Because there is no such item included.
The WITNESS: I just testified to that.
Mr. MATHEWSON: Of course.
Mr. GANS: I am quite willing to accept your amendment, because it amounts to the same thing, doesn't it?
Mr. MATHEWSON: No, we didn't represent it as paid under the agency agreement as part of the cost of gas.
The WITNESS: It is all in the agency agreement.
Mr. GANS: All I wanted to know was whether it appeared on the face of this account.
Mr. MATHEWSON: It does.
The WITNESS: It does, yes, sir.

Q. The amount of interest was specified in the testimony I read to you.
A. For that particular period, yes, sir.

By Mr. GANS:

Q. Can we identify that period?
A. The year 1904.
Q. The nominal year?
A. The nominal year and the calendar year, 1904.

Mr. MATHEWSON: I call the Master's attention and your
992 attention, Mr. Burr, to the agency agreement, paragraph 5, which reads as follows:
"The Consolidated Gas Company of New York further agrees

that it will at the end of every period of six months during the term of this agreement pay to the New Amsterdam Gas Company, interest at the rate of five per cent. per annum, for the previous six months upon the amounts expended by the New Amsterdam Gas Company, in making additions to its Ravenswood Works since March, 1901, for the purpose of increasing or facilitating the manufacture of gas." Therefore this interest item was provided for in the agency agreement. The New Amsterdam Company offered to add to its facilities for the purpose of producing the gas which we received. Instead of being carried in a general memorandum under agency agreement for the period, Mr. Carter testified the amount was carried in the interest account, and of course paid under that agreement. That is the whole thing.

Mr. BURR: It is becoming more apparent to me every day that we would get along better if Mr. Mathewson were testifying.

Q. Have you got the contracts for the gas stoves?

A. We have contracts for the manufacture of a particular type of stove which we rent.

Q. That particular kind of stove is manufactured under contract?

A. I have so testified.

Q. Will you please produce the contract to-morrow?

A. Yes.

Q. Now, are there any other gas stoves that are made under contract?

A. No, sir.

Q. The others you purchase yourselves, do you, or the company purchases them?

A. Yes.

993 Q. Have you any place in the record which will give us any information as to the price you pay for gas stoves?

A. No, sir.

Q. Will you be kind enough to procure such information?

A. Yes, sir.

Q. The gas that is supplied to gas stoves is known as fuel gas, is it not?

A. No, sir, it is not.

Q. Do you supply the same kind of gas to stoves that you supply to lamps for illuminating purposes?

A. Identically the same, yes.

Q. Do you supply the same kind of gas for power purposes that you supply for fuel purposes?

A. Yes.

Q. Do you charge the same amount for gas supplied to large consumers as you do to small consumers?

A. Yes.

Q. Outside of the City of New York, I am speaking?

A. So I understood you to mean.

Q. Have you furnished any place here in the statement presented, a statement of the real estate of the company?

A. Have I? No, sir.

Q. You have been called upon to furnish a statement of rentals. Have you such a statement?

Mr. MATHEWSON: You asked that of Mr. Francklyn.

Mr. BURR: I am asking Mr. Carter now.

A. You have not asked me for anything of that kind.

Q. You have been asked for a statement of the rentals received from the Consolidated Gas Company's real estate?

A. I was not aware of it.

Q. You were not? Then, will you be kind enough to have such a statement as that prepared also?

Mr. MATHEWSON: I can give you such a statement now.

994 Q. While Mr. Mathewson is looking for that paper, can you state how many gallons of tar per ton you obtain from bituminous coal?

A. I can get you that information. For what period do you want it?

Q. For the period embraced in these Complainant's Exhibits 93 and 94.

Mr. BURR: I am handed a paper by Mr. Mathewson purporting to be a statement of rents received by the Consolidated Gas Company. There is no time or period stated.

Mr. MATHEWSON: For what period did you ask Mr. Francklyn. If you will refer to your question again, this is an answer to it, as far as I can give it to you now.

Mr. BURR: Well, I have a memorandum here of the exact request.

Mr. MATHEWSON: I think that is the calendar year.

Mr. BURR: As previously stated, Mr. Mathewson, if you would be good enough to hand the statements asked for as they are made, it would save a lot of time and would be a good deal more direct on the examination.

Mr. MATHEWSON: You have asked Mr. Francklyn to produce it. I suppose you wanted it, his testimony on it. I am merely handing it to you now as a matter of courtesy, because I thought you asked for it.

The MASTER: At page 70 you asked for the rentals, and no period appears to be there specified. It would refer back to Defendant's Exhibit A, I should judge.

Mr. MATHEWSON: That is the disadvantage of my presenting it. Mr. Francklyn would know precisely.

The MASTER: Let us drop it and go on with something else, so that we may make some progress.

995 A. This is a statement of the property we rent at the present time, the annual rental we receive for it. That is all it purports to be. It does not cover any particular period; it is simply a statement of the annual rentals of the company.

The MASTER: That is what the question calls for on page 70, a statement of the rentals that are derived from the property of the company.

Mr. MATHEWSON: In supplement to the paper I have handed you,

Mr. Burr, I should add that the 41st street stable is used in part by the National Coal & Coke Company, one-half or a part of the 41st Street stable; that is used in part by the National Coal & Coke Company, for which they pay the Consolidated Gas Company $1,800, in addition to that statement; it does not appear on that statement because we have regarded this company as our cartage department and as part of the company, but for exact accuracy that should be added; part of the 41st Street stable, $1,800.

Mr. GANS: Do you know whether that is charged in the operating expenses of the Coal & Coke Company?

The WITNESS: Yes.

Mr. MATHEWSON: And the $1,800 appears in our receipts, and there is another item in that connection which may or may not be considered of value. Number 335 Avenue A, which is a short and narrow city lot adjoining our works, is occupied by the foreman of the works free, as part of his compensation. It is not rented. If you do not want that statement I would like to have it, because I intend to offer it myself later. But if you have put pencil figures on
996 it you may keep it, and I will get another copy later.

(Mr. Burr retains the statement.)

Mr. BURR: The paper you have handed me I understand is a copy of list of rentals derived from the property owned by the Consolidated Gas Company.

Mr. MATHEWSON: It is a statement of the rentals I believe, yes; I do not know that it is a copy of any other paper that has been presented. It may be.

Mr. BURR: I asked Mr. Francklyn "Can you get a copy of it or a list of the rentals," to which he answered "Yes." So, I assume that this is the list which is presented to answer that inquiry?

Mr. MATHEWSON: Undoubtedly. I made the additional statement about the 41st street stable so that you might have the whole facts before you.

Q. Have you, since I spoke to you about the matter, looked at the books of the constituent companies for the purpose of ascertaining whether the statement of their value, as contained in the report of the General Committee of Senate and Assembly, was correct?

A. I have no understanding that I was to do anything of that kind.

Q. You have the books of the constituent companies, have you not?

A. I do not know that I have, Mr. Burr; they are not books of reference. I presume it is 22 years at least since they have been opened, and I would not like to say that I could find the books at all.

Q. Will you find out so as you may be able to definitely answer the question as to the whereabouts of these books, by to-morrow, or the next hearing?

997 Mr. MATHEWSON: I do not know what special value the books would have if they were produced. They are not evidence as against us, and I do not know that there would be anything in them that would be valuable if it was evidence against us.

Mr. GANS: I should think they are of considerable interest on the cross-examination, in connection with the appraisal of the property.

Mr. MATHEWSON: All that has been presented in that record is that the property was appraised at a certain figure, and the books were opened on that basis, and the Act under which the consolidation took place provided that the companies should consolidate and might issue stock of the aggregate value of the property, franchises and rights of each company.

Mr. BURR: There was a finding by the Joint Committee of Senate and Assembly which resulted and is set forth in its report, to which I have called this witness' attention. That was a very material statement, and I have asked him what information he had upon the subject, and he has undertaken to say that the value given by the committee in that report is not the true value of the property of the constituent companies at the time they were consolidated, in November, 1884. I am asking him now this question for the purpose of ascertaining if I can go back to the original sources of information—the books of the constituent companies themselves—and I am now simply trying to ascertain from him, if possible, where those books are located. I have understood him to say heretofore that the books of the constituent companies were in the possession of the Consolidated Gas Company, and I am now asking him as secretary
998 of the Consolidated Gas Company if he can tell me whether the books are still in the possession of the Consolidated Gas Company and if they can be produced here.

Mr. MATHEWSON: That is all part of your cross-examination. There was no evidence whatsoever put in by us, and on your own cross-examination you cannot lay a basis for indefinitely piling one stone upon another, according to my understanding of it. You present here what purports to be a report of the Joint Legislative Committee of a year ago. You have not introduced it in evidence at all. You are endeavoring to get this witness to testify to facts by asking him if such and such a thing is not stated in the report of the investigating committee.

The MASTER: Do not let us spend any more time about it. The question calls for the witness to do something out of Court which he can do or cannot do. I shall not instruct him to do it. He will either be able to produce the books or he will not. If you want the books you can subpœna them *duces tecum* when the time comes, and if they are not produced you will know what the situation is.

Mr. BURR: I have made a request of him to make inquiry between now and the next hearing, to-morrow afternoon, to ascertain if possible where those books are. If he says to-morrow that he has made such inquiry and says that he cannot locate those books, that is a complete answer to my question.

Mr. GANS: I might ask for our own information, because it may become useful. Provided he cannot get those books, will you require the services of a subpœna *duces tecum*?

Mr. MATHEWSON: Let us not take that up. I think that is wasting time.

999 Mr. GANS: I thought possibly you would be willing to stipulate that you would produce them without subpœna.

Q. I understood you to say that you are not certain whether there was an agency agreement with the Central Union. Have you found out whether there is such an agency agreement in existence and in writing?

A. I have not been able to find such an agreement.

Q. Is there such an agreement in existence?

A. I have no knowledge of one, if there is, which is pretty conclusive evidence to my mind that there is not one in existence.

Q. Was there ever any written agreement between the Central Union Gas Company and the Consolidated Gas Company for the manufacture of gas?

A. I have no knowledge of any such agreement ever having been made.

Q. You would not swear that there was not?

A. No, I could not. There is no record of such an agreement of any kind in our record of contracts or agreements, so I think I am safe in saying there never has been such an agreement in writing.

Q. I call your attention again to the request which I made at the last hearing, for a statement as to the cost of holders, etc. Have you done anything in regard to that?

A. No, sir, I have not done anything in connection with the preparation of it.

Q. You have a statement at the office showing the amount of coal and oil consumed by each station, have you not, during the period covered by Exhibits Nos. 93 and 94?

A. Our engineering department records show the quantity of oil used daily, which are aggregated into monthly and yearly totals.

Q. That would not be in your department, but the engi-
1000 neering department?

A. The engineering department.

Q. And that could be checked up by the accountant, could it not, if desired?

A. Yes, very easily.

By Mr. GANS:

Q. You do receive monthly reports, including those items, from the engineering department to the accounting department, do you not?

A. No, we do not. As I have already testified, we simply have access to the engineering department records.

Q. Am I mistaken in this; has it not been your habit to get from the engineering department a statement month by month of the cost of operation of each one of your plants, for the purpose of comparing that statement with a similar statement for the preceding year?

A. No, sir.

Q. Did you not so testify before the Commission?

A. Never.

Mr. MATHEWSON: No, he testified that there were certain items of cost which were compared, that he kept a record of certain items for

purposes of comparison, but nothing showing a comparison of the total cost of gas at either station.

Q. At page 812 of the present record, you were asked the question: "Q. Now, I understand that you pay those companies that supply you with gas, or from whom you purchase gas under the contract which has been offered in evidence, ten cents over and above the cost of production?"

Mr. MATHEWSON: No, ten per cent.

1001 The WITNESS: Ten per cent."

Mr. MATHEWSON: Ten per cent. on the cost of material."

Now, which is it, the cost of production or cost of material?

A. The cost of production, which includes material.

Mr. MATHEWSON: Material and labor, and in my copy I have already made the change.

Q. You have referred to an accident to one of your stations or holders—in 14th street, was it—that you spoke of the other day, some accident which resulted in a lawsuit which is now pending?

A. The 21st street station.

Q. Was that accident caused by an explosion of gas, or was it caused through defective construction?

A. I do not know; I know that it was not gas; at least—I say I know; I feel quite sure it was not gas.

Mr. MATHEWSON: It was in process of construction, and no gas was turned into it.

Q. That is what I want to bring out; it was an accident that occurred while the tank was being constructed and before those tanks had been received from the contractors?

A. It was before the tanks had been received from the contractor; they had not been accepted, although payment had been made on account, as the construction progressed.

Q. It was not in any way due to gas, an explosion of gas or combustion of gas?

A. They contend that it was not due in any respect to defective construction; so there you are. I believe the courts have not decided what it was due to.

Q. Do you know when gas stoves first came into use by the

1002 Consolidated Gas Company?

A. I do not think they first came into use by the Consolidated Gas Company. I think gas stoves were in use before the Consolidated Gas Company came into existence.

Q. Has not the use of gas stoves increased from year to year very materially?

A. Why, there has been an increase from year to year, not very material; I should consider it rather a normal increase in the use of appliances.

Q. Have you a statement showing the increase in the use of gas stoves for the supplying of gas from year to year?

A. At best it could be but an imperfect one, because there are a

great many people selling gas appliances in the City of New York besides the Consolidated Gas Company.

Q. All the business of the gas stoves is done by your company? It is not let out or rented out to any other person or corporation, as in the case of the Coal & Coke Company?

A. Why, we have no monopoly of the gas appliance business; every dry-goods store and department store in the city handles gas appliances.

Q. Gas stoves?

A. Yes.

Mr. MATHEWSON: Do you mean every dry-goods store, or hardware store?

The WITNESS: Both dry-goods stores and hardware stores.

Q. And their are bargain sales of gas stoves?

A. Oh, there are bargain sales of gas stoves advertised by the different department stores occasionally.

Q. Is there any way of ascertaining the amount of gas that is used solely for fuel purposes?

A. I do not know of any means of arriving at it.

Q. Is there any record that would show the amount
1003 & 1004 of gas that is used for power purposes?

A. I know of no such record.

Q. All that kind of gas comes out of the same tank?

A. It all comes out of the same tank and is registered by the same meters, in some cases.

At 5:30 o'clock, P. M., adjourned to to-morrow, August 21, 1906, at 1:30 o'clock P. M.

Last Exhibits:

Complainant's 100.
City's 30.
State's N.

1005 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, *August 21st*, 1906—1.30 p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Burr, Mr. Page, Mr. Gans.

1006 ROBERT A. CARTER, resumes the stand:

Cross-examination by Mr. BURR, continued:

Q. Have you produced the books of the constituent companies, as they existed in November, 1884?

A. No, sir.

Q. Have you ascertained their location?

A. I have not, no, sir.

Q. Have you made inquiry for that purpose?

A. No, sir.

Q. I understood yesterday that you were to ascertain where they were?

A. It was not my understanding.

Q. I call your attention to the record, page 996, 4th question: "Q. Have you, since I spoke to you about the matter, looked at the books of the constituent companies, for the purpose of ascertaining whether the statement of their value, as contained in the report of the General Committee of Senate and Assembly was correct? A. I have no understanding that I was to do anything of that kind. Q. You have the books of the constituent companies, have you not?"

The MASTER: Pardon me, Mr. Burr; is it necessary for your protection to waste any more time on that. You have made your point, and the matter was left open here yesterday. I gave no instructions about it, and the witness answered your questions about it, it seems to me that it is only unnecessarily using up time and putting him through it again.

Q. So that you don't know to-day any more than you did yesterday where the books of the constituent companies are?

A. No, sir.

Mr. BURR: I offer in evidence page 776 of Senate Docu-
1007 ment No. 47, being the report and testimony of the Senate Committee appointed to investigate lighting companies, dated March 1st, 1886.

Mr. MATHEWSON: Which page do you offer?

Mr. BURR: Page 776.

Mr. MATHEWSON: I object to that as incompetent as evidence, also as immaterial and irrelevant. In addition to all else the paper appears to be a characterization of certain items which are not sustained at all by the testimony appearing in the book. That is a table appended to the report of testimony before the Senate Committee of 1885, reporting in 1886.

Mr. BURR: It is a table prepared from the books of the company by an expert employed by the committee and certified by him in that document.

The MASTER: Of course it is clearly incompetent.

Mr. BURR: I have asked for the original books, and if they produce the original books I will show the same figures that are there.

Mr. MATHEWSON: The original books would not be competent. The books of an assignor, or a statement by an assignor are not competent against an assignee.

Mr. BURR: You have offered in evidence the appraisal which is attached to the same document?

The MASTER: As I was saying they are clearly incompetent, and I do not know that they are very material on the question as to whether the value of this property as it stands to-day is proved by showing what the value was twenty years ago. It is not of very great moment, but I am disposed to admit any such thing
1008 as this for what it is worth. I will give you an exception, Mr. Mathewson, I will let it in. It may be useful in some aspect. I will take it for whatever it is.

Mr. MATHEWSON: I except.

Received and marked City's Exhibit 31.

Q. Have you produced any of the statements called for Mr. Carter?

A. I have produced two letters, dated respectively April 29th and May 1st, 1903, and referred to in coal contract marked City's Exhibit No. 16.

Mr. BURR: I offer these letters in evidence as part of City's Exhibit 16.

Q. Wasn't it, Mr. Carter?

A. Yes, sir.

Received and marked City's Exhibit 16*a*, August 21st, 1906.

Q. The first letter is dated April 29th, 1903, and is addressed to Mr. L. B. Gawtry, Vice-President of the Consolidated Gas Company, by the Manager of the seller. "This will confirm our conversation of this date, whereby the —— company agrees to sell to the Consolidated Gas Company of New York, 50,000 tons of —— ¾ screened coal, to be shipped between date and April 1st, 1904, to be delivered in boats alongside the docks at your plants. The price to be $3.45 per ton of twenty-two hundred and forty pounds. It is understood that on this contract we will ship you coal from our —— and —— mines, or in the event of our inability to ship coal from these

two mines, we will ship you coal equal thereto if not better, for gas making purposes." That letter is stamped "Executive Committee" approved May 5th, 1903. Letter same date, April 29th, 1903.

1009 The WITNESS: This is the original of the letter you have just read, that being a copy.

Mr. BURR: Letter of May 1st, 1903, from the Vice-President of the Consolidated Gas Company to the Manager of the Seller Company, acknowledging receipt of the letter of April 29th.

Q. You will have copies of this put in?

A. Yes, sir.

Q. What other papers have you?

A. You asked me, Mr. Burr, in connection with the coal contract marked City's Exhibit No. 18, to confirm my understanding that the deduction referred to in the contract amounted to 25 cents per ton. That I have done.

You also asked in connection with the coal contract marked City's Exhibit No. 27, that I ascertain what cash discount was referred to in the contract, and ascertain also whether I was correct in my statement that that was a discount for prompt payment of the bill, and that there were not similar discounts in connection with any other of the coal contracts. I have confirmed my testimony both with respect to the discount referred to in the contract marked "City's Exhibit No. 27," that it is a discount for prompt payment, also that there are no similar discounts in connection with any other coal contracts.

Q. No rebates either?

A. No rebates of any kind.

Q. Did you ascertain whether there had been any change in the freight rate or in the mining rate as specified in some of those contracts for coal?

A. None other than were referred to in the correspondence attached to the contracts. I will make an examination and confirm that statement.

1010 You also requested me to have statements prepared showing the deliveries under the contracts that have been offered in evidence of coal and oil to the Consolidated Gas Company and to other companies to whom deliveries were made under those contracts. That involved so much work, that acting on advice of counsel, I brought the record of deliveries under those various contracts to this hearing, and it is here for your inspection.

Mr. MATHEWSON: It will take some time to go over them all, Mr. Burr, and rather than delay——

Q. Is there any other statement that you have produced as I requested?

A. I don't recall anything else. Oh, yes, there was. You asked for the contracts for the ranges that are manufactured for the company, gas ranges. I present them.

Mr. MATHEWSON: All these papers?

The WITNESS: Relate to two agreements, Mr. Mathewson.

(Paper handed to Mr. Burr.)

Mr. BURR: I offer this in evidence.

Received and marked City's Exhibit 32, August 21st, 1906.

Mr. BURR: I also offer this contract in evidence.

Received and marked City's Exhibit 33, August 21st, 1906.

Q. I notice Mr. Carter, City's Exhibit 32, being a letter from the seller to the Chairman of the Executive Committee of the Consolidated Gas Company of New York, is headed "Proposal" and states

"In response to your kind invitation to bid on your Phœnix
1011 cast iron rental ranges we beg to submit the following prices."

This is the only contract that appears to be submitted in the form of a proposal, so far produced by you, is it not?

Mr. MATHEWSON: I think, Mr. Burr, that all these other contracts show what they are.

Mr. BURR: Well I won't ask you to qualify them.

Q. "On approximately 2,000 16-inch ovens and 5,000 18-inch ovens cast iron Phœnix Ranges we bid as follows, f. o. b. cars Baltimore, not crated: 16-inch ovens, four-burner c. i. Phœnix Gas Ranges $11.25 each net." I won't bother to read the balance of it, but I want to call your attention to the memorandum in writing on this proposal, "Less 10 per cent. cash ten days." What does that mean?

A. May I see the contract?

It refers to the conditons of payment stipulated in the following letter, dated November 3rd; it is not 10 per cent., but one per cent.

Q. In the letter from you to the Consolidated Gas Company dated November 3rd, 1905, it is stated:

"We will allow you one per cent. for cash within ten days from date of invoice."

The third letter is dated November 4th, 1905, and purports to be a letter from the Superintendent of the Consolidated Gas Company to the seller, regarding the patterns to be supplied for the ranges. City's Exhibit No. 33 quotes a net cash price of $11.63, 10 days, f. o. b. New York, on Phœnix Ranges No. 16, on an order for 4,000 ranges, with an option to you of taking an additional four thousand during the year 1906.

The letter of October 30th, 1905, to the Chairman of the Executive Committee of the Consolidated Gas Company, states in
1012 detail the prices at which these ranges are to be delivered, and states: "In presenting our proposal, we wish to call your attention to the fact that we have been manufacturing your range for the last three years, and have become thoroughly familiar with all your requirements."

The letter of November 3rd, 1905, addressed to the Consolidated Gas Company, states that it will be impossible for the seller to allow "a greater cash discount than that named in our quotation of the 30th ultimately."

Both of these contracts appear to have been approved by the Executive Committee, and are so stamped.

Did you bring down the insurance policies?

A. No, I did not; I am free to confess. That in the rush of other things it escaped my mind. I can telephone for them and will do so and have them down here during the afternoon.

Q. Are these all the statements that you have produced?

A. No, I have a couple of others here, but first, while I have it in mind, I want to say that I confirmed my impression that all of the contracts that have been put in evidence were approved by the executive committee.

You ask me to state how much of the income from securities owned shown in Complainant's Exhibit 96, and amounting to $1,065,641.74 was in the nature of interest. During that period we received $357,345.74; that is, during the calendar year 1905. During the nominal year ending October 31st, 1905, we received $355,430.62, which forms a part of the item "Income from miscellaneous securities owned," in Complainant's Exhibit No. 95.

By Mr. MATHEWSON:

Q. Was that money all received, or does that include money due on bonds?

A. It includes money due; it was not all received, no, sir.

1013 Q. Some of those bonds were bonds of the electric companies to whom moneys were due from the city, were they not?

A. That was the case. They have not been able to pay their interest, but nevertheless we have shown it in our statement as income and charged them with it, and they stand on our books as debtors for that accrued interest.

By Mr. BURR:

Q. The first item that you speak of, $357,345.64, is interest on what?

A. On bonds.

Q. What kind of bonds?

A. Mortgage bonds of the United Electric Light & Power Company, the New York & Westchester Company and the Bush Electric Illuminating Company; the same with respect to both statements.

You also asked me to state the gallons of coal tar produced per ton of coal carbonized during the nominal year ending October 31st, 1905, and the calendar year 1905. During the nominal year ending October 31, 1905, we produced 13.56 gallons of coal tar per ton of coal carbonized, and during the calendar year of 1905 we produced 13.45 gallons of coal tar per ton of coal carbonized. That is all.

Q. The book which you have produced shows the amount of coal and oil that each of the subsidiary companies received and the periods in which they received it?

A. No, sir, it only shows the coal and oil that they received under contracts which have been put in evidence here, as made by the Consolidated Gas Company, and not coal or oil that they may have obtained under any contract of their own.

Q. That is what I understood. I was only asking you to give me a statement of the amount of coal and oil which the subsidiary companies used under the contracts that were made by the Consolidated Gas Company which have already been offered in evidence. Will you let me look at the book, please?

1014 Mr. MATHEWSON: Show him the period which we have under discussion here.

The WITNESS: Which particular contract? This book is full of things.

Mr. BURR: Let us take the two oil contracts.

The MASTER: What is that book you now produce?

The WITNESS: It is called "Vouchers audited, contracts."

The MASTER: Better mark it for identification.

(The book is marked for identification, City's Exhibit 34.)

The WITNESS: Here, for example, is a contract made November 1, 1905, running to June 30th, 1908.

The MASTER: Referring to what page?

The WITNESS: Referring to page 262 of City's Exhibit 34 for identification, calling for 102,000,000 gallons of 34 degree oil and above. The record indicates the date of deliveries, the point of deliveries, the gallons as per invoice, the barge number in which delivery was made, the price at which delivery was made, and the amount of the bill and the gallons as per the company's measurement.

Q. What column shows where the oil was delivered?

A. The column headed "Station."

Here for example the first delivery was at the 21st Street station; the next to the Standard Works, next to the Central Union Works, next to 21st Street, next to 42nd Street, next to 44th Street, next to the New Amsterdam Company, and so on.

1015 Q. In the column headed "Stations," what does the letter S stand for?

A. Standard.

Q. What do the letters NA stand for?

A. New Amsterdam.

Q. And the letter B?

A. I don't see any.

Q. What is that?

A. That is an S.

Q. That stands for the Standard?

A. Yes.

Q. CU, is that?

A. Yes, Central Union.

Q. And this (indicating)?

A. 21st Street.

Q. The figures in red ink under the column headed "contract," I call your attention to. What do those figures mean?

A. It means that the quantity delivered between the 1st of November and the 29th of November, which was the last day in November on which deliveries were made, and amounting in the aggregate to 6,190,868 gallons, has been summarized by the clerks keeping this record so as to show the quantities delivered to the Consolidated Gas Company, the New Amsterdam, the Standard and the Central Union companies.

Q. Will you read the amounts delivered to each, as they appear in red ink figures on page 262, in the column headed "Contracts."

Delivered.	Gallons.
To the Consolidated Gas Company	3,119,192
To the New Amsterdam Company	1,752,662
To the Standard	787,944
To the Central Union	530,870
Making a total of	6,190,868

gallons delivered during that period; that is, during the month of November, 1905.

Q. I call your attention to the figures in writing in red ink on page 264 of this book, in the column headed "Contract," and ask you what those figures and words refer to?

A. That is a statement of deliveries of oil to the different
1016 companies during the month of December, 1905.

Q. Will you please read the amounts?

A.

	Gallons.
To the Consolidated	4,751,708
To the New Amsterdam	2,543,172
To the Standard	1,192,056
To the Cen-ral Union	703,804
Total	9,190,740

Q. The total deliveries to the companies named in this column as they appear in red ink up to the date of January 1, 1906, appear to be 15,381,608?

A. That is the case, from November 1 to December 31, 1905.

Q. On page 265, in the column headed "Contract" the figures in writing in that column designate in the same manner the amount of oil that was consumed by those companies named, up to what date?

A. Up to January 31, 1906, but my understanding is that our tabulations of this account terminate with December 31, 1905.

Mr. MATHEWSON: Beyond that it has no relation to any statement which has been presented. Prior to that you will find the deliveries, I suppose, in the same shape.

Mr. GANS: It is relevant, I take it, up to the 31st of December, 1905?

Mr. MATHEWSON: Yes, and that has already appeared. Now you can show Mr. BURR where it appears for the time previous to December 31, 1905, the period covered by the two statements, October 30th, 1904, December 31st, 1905.

Mr. GANS: Didn't he start with the 1904 amount?

Mr. BURR: No, 1905.

1017 Q. You are now referring to page 260 of this book?

A. Yes.

Q. What appears on that page?

A. A statement of deliveries beginning March 28th, 1905, and extending to June 9th, 1905.

Q. In the column headed "Contract" on page 260, there are

figures and words entered in red ink. Do those figures refer to the amount of oil under the contract in operation at this period, delivered to the companies named in that column during that period?

A. They do.

Q. And they appear to be what, the number of gallons?

A. The statement covers the period from April 1 to April 30; the deliveries in March are not summarized in the margin in red, but are for deliveries to each of the different stations, so that there was no occasion for making a red ink marginal summary. Deliveries in March were:

	Gallons.
To the Consolidated	326,268
To the Standard Company	100,578

During the month of April the deliveries were:

	Gallons.
To the Consolidated	2,525,497
To the New Amsterdam	1,413,951
To the Standard	876,631

Q. What is this amount of 426,000, odd?

A. It adds to the month of April the deliveries during the few days in March, amounting to 426,846 gallons.

Q. Making the total deliveries what?

A. Making the total deliveries up to April 31st, 1905, 5,242,925 gallons.

Q. Continue, if you please, with regard to the other figures appearing in red ink in that column? What do they represent?

A. The next statement indicates that the deliveries during the month of May were all to the New Amsterdam Company;
1018 1,458,361 gallons. The net statement indicates that to June 9th.

Q. Excuse me; what did you say the total was?

A. 1,458,361 gallons delivered during the month of May.

Q. What are the other figures?

A. It simply brings down the total from above, 5,242,925 gallons, and establishes a new total to the 31st of May, 1905, of 6,701,286 gallons.

Q. Referring to the column headed "Contract" page 261, what do the figures in red ink there indicate?

A. During the few days in June during which deliveries were made, there was delivered to the New Amsterdam Company 506,696 gallons. To this amount is added the total previously shown of 6,701,286 gallons, making total deliveries to June 9th, 7,257,982 gallons.

Q. I call your attention to the entry in red ink in the column headed "Description," 229,039 gallons charged, 199,355 gallons received. What is the meaning of those entries?

A. That means that our measurements do not agree with the amount charged in the bill and that an allowance was made for the excess charge, amounting to 29,684 gallons, and operated to reduce the amount accounted for as delivered during that period.

Q. And that shortage appears, under the column headed "Amount" and "Gallons as per Gas Company's Measurement" to have been allowed as an equivalent to $1,372.89?

A. Yes, that is the amount of 29,684 gallons calculated at the price of 4.625 cents per gallon.

By Mr. PAGE:

Q. Just one moment before you leave that. Is that all oil of specific gravity of 34 degrees and over, Beaumé?

A. Yes.

1019 —. Do you wish to proceed further with this, Mr. Burr?

Mr. MATHEWSON: Wouldn't you rather have a statement tabulated, instead of going through it here in this way?

The WITNESS: This happens to be a very simple matter, Mr. Mathewson, with respect to these oil contracts, but when it comes to coal contracts it is quite another proposition. You see here there has been no such summary made from time to time of the deliveries to each company, and in that case it would mean a great deal of time to summarize these, showing the deliveries to each company.

Mr. MATHEWSON: How long would it take the company to do it?

The WITNESS: It would take a very long time; it looks very simple here because this has all been done with respect to these oil contracts, as a matter of record; the same record has not been kept with regard to coal contracts. As the record shows, here are deliveries during 1905, for example, of a certain kind of coal, but there is no summary made of it whatever; it means that somebody must get to work and pick all of this out and separate it and summarize it for each one of these contracts.

Now, as to the deliveries of coal to the Consolidated Gas Company, as has already been testified, it is a matter of record in the Engineering Department, the records being made from daily reports from the stations.

Mr. PAGE: Don't let us get away from this oil subject just now.

The WITNESS: Now, I can summarize this oil proposition for you in a very little time with respect to the operations for the year 1905.

1020 Mr. BURR: We can do that now, can't we?

The WITNESS: If you want to put in the time that way, this afternoon, I have no objection whatever.

Mr. PAGE: The statement was asked for, and this is Mr. Mathewson's idea of bringing it down.

Mr. MATHEWSON: The witness had not time to make this statement.

The MASTER: The witness was asked yesterday to make up a statement of this kind, whether he could have it here to-day. He said it would take some time to do it, but he would try to have it here at half past one to-day, and, as I understand the proposition, he found upon looking at the books that it meant too much of a contract, and he brings the book down to show counsel how great a task it would have been to have prepared the statement. That is correct, is it not?

The WITNESS: Yes, sir.

By Mr. BURR:

Q. Where does that account with the Standard Oil Company begin?
A. To what account are you referring?
Q. To the oil account.

Mr. MATHEWSON: Beginning with October 31st, 1904.

A. On page 230.
Q. Now, is there any way of ascertaining how much oil you had on hand at that time?
A. On October 31st, 1904?
Q. Yes.

A. Why, it most decidedly is a matter of record. The bal-
1021 ance sheet which you have of that date will show the value of the oil on hand.

Q. That is the number of gallons?
A. It will not show the number of gallons, but the records of the Engineering Department will give the corresponding number of gallons on hand on October 31st, 1904.

By Mr. PAGE:

Q. The figures in red ink just preceding November 1st, do they indicate the total oil that was bought on that contract up to that date?
A. Yes. Delivered would be a better term, under that contract.
Q. Let us have that figure?
A. 7,734,076 gallons.

By Mr. BURR:

Q. On page 232 I call your attention to the entries in red ink in the column headed "Contracts;" what do those figures refer to?
A. They state the deliveries made during the month of December, 1904.
Q. Will you please read them?
A.—

	Gallons.
To the Consolidated	4,507,562
To the Standard Company	1,457,053
To the New Amsterdam	3,057,500
To the Central Union	556,237
Making a total of	9,578,352

Q. The figures in red ink in the column headed "Description," refer to the degrees of the oil?
A. The degrees of the specific gravity.
Q. The degrees of the specific gravity of the oil delivered?
A. Yes, sir.
Q. To the stations and to the companies?
A. Yes, sir.

1022 By Mr. PAGE:

Q. And this relates to the quantity which should be delivered of 28 degrees Baumé and over?

A. Yes, sir.

By Mr. BURR:

Q. The entries in red ink headed "Contract," on page 234; what do they refer to?

A. To the deliveries during the month of January, 1905.

Q. Will you please read them?

A.—

	Gallons.
To the Consolidated	4,550,572
To the Standard Company	1,153,726
To the New Amsterdam	2,411,583
To the Central Union	308,818
Total	8,424,699

Q. And on page 235 the same entries appearing in the column headed "Contract," do those refer to the amounts taken by each company or delivered to each company named therein?

A. They indicate that during the month of February, 1905, there was delivered:

	Gallons.
To the Consolidated	3,750,861
To the Standard	1,111,198
To the New Amsterdam	2,269,486
To the Central Union	323,713
Total	7,455,258

Q. Is there anything on that page which indicates there has been a variation in the amounts billed and the amounts received, of oil?

A. Well, there are some pencil memorandums there by the clerk referring to some correspondence, but there is nothing there
1023 specifically as to measurements. I presume it noted some variation, or referred to some variation between their measurements and ours. There is nothing so stated.

Q. There is an entry here, "44th Street report that they could not vouch for the accuracy of measurement." Do you know anything with regard to that?

A. No.

Q. Will you turn to page 236 and please explain the entries in red ink in that column headed "Contract," and state what they are?

A. The statement on page 236 indicates that during the month of March, 1905, there was delivered:

	Gallons.
To the Consolidated Company	3,468,106
To the New Amsterdam	1,720,720
To the Standard	951,340
To the Central Union	315,091
Making a total of	6,455,257

The WITNESS (continuing): The next statement indicates deliveries during the month of April, 1905:

	Gallons.
To the Consolidated Company	905,598
To the New Amsterdam	96,615
To the Central Union	252,868
Making a total of	1,255,081

The WITNESS (continuing): The next statement indicates deliveries during the month of May, 1905:

	Gallons.
To the Consolidated Company	3,034,082
To the Standard	890,094
To the Central Union	330,115
Making a total of	4,254,291

1024 The WITNESS (continuing): The next statement indicates the deliveries during the month of June, 1905, being on page 238:

	Gallons.
To the Consolidated Company	2,724,680
To the Standard	896,093
To the New Amsterdam	594,055
To the Central Union	329,266
Making a total of	4,544,094

Q. That brings it up to what date?

A. Brings it up to—well, I said it was during the month of June. It brings it up to June 30th.

The WITNESS (continuing): The next statement is on page 239, and indicates deliveries during the month of July, 1905:

	Gallons.
To the Consolidated	2,595,869
To the New Amsterdam	1,910,787
To the Standard	696,515
To the Central Union	535,837
Making a total of	5,739,008

The WITNESS (continuing): On page 240 the statement indicates that there were deliveries during the month of August, 1905:

	Gallons.
To the Consolidated Company	2,592,806
To the New Amsterdam	1,278,089
To the Standard Company	671,110
To the Central Union Company	429,733
Making a total of	4,971,738

The WITNESS (continuing): The statement on page 241 indicates deliveries during the month of September, 1905:

1025

	Gallons.
To the Consolidated	2,757,489
To the New Amsterdam Company	1,768,384
To the Standard Company	796,286
To the Central Union	516,098
Making a total of	5,838,257

The WITNESS: October doesn't seem to be summarized.
Q. That month can be summarized for this book, can't it?
A. Of course it can.
Q. Well, will you have it summarized?
A. Well, I brought the book down to avoid all this work.
Q. I will summarize it for you.
A. I will call the entries off for each month.

(The entries are called off to Mr. Gans, Mr. Heyward, and the stenographer and the following results obtained for the month of October:)

	Gallons.
To the Consolidated Company	4,023,398
To the New Amsterdam	2,530,037
To the Standard Company	984,257
To the Central Union	539,923
Making a total of	8,077,615

Q. Well, continue if you please and read the entries in the column on page 242. The total on page 242 appears to be what amount?
A. The total given there has no reference to any figures that have been read into the record. It is simply a total of deliveries under that contract and goes back or at least includes deliveries prior to October 31, 1904.
Q. I will ask you what the total 82,061,124 on page 242 of this book in colmun "Gallons as per invoice" refers to.
A. It refers to the total quantities of oil delivered from September 28th, 1904, to October 31, 1905.

1026 Q. Now, will you continue and tell us the meaning of the entries in the column headed "Contract" on page 243, in red ink?

A. There is a red ink marginal entry indicating that there were delivered during the month of November, 1905,

	Gallons.
To the Consolidated Company	782,771
To the New Amsterdam	306,570
To the Standard	199,626
To the Central Union	152,792
Making a total of	1,441,759

Q. At the top of this column headed "Contract" appear the words and figures "153,000,000 gallons, 28 and below;" what does that mean?

A. 28 degrees specific gravity and below.

Q. Does that refer to a contract for 153,000,000 gallons of that kind of oil?

A. It refers to a contract, 255,000,000 gallons of 28 degree and 34 degree.

By Mr. MATHEWSON:

Q. That is City's Exhibit No. 30?

A. That is City's Exhibit No. 30.

By Mr. BURR:

Q. Now will you turn to the column on page 243. Have you read all in the column on page 243?

A. No, sir. There was one delivery in December of 110,675 gallons to the Consolidated Company.

Q. Is that all that appears?

A. That is all.

Q. Now, turn to the next column?

A. Nothing more.

Q. Or to the next page?

A. Nothing more.

Q. I call your attention to an entry on page 239 in lead pencil as follows: "Mr. B. says not to take exception to the quantity
1027 billed;" what does that mean?

A. I don't know other than that there may have been a small difference that the clerk was working at and that the engineering department—presuming this to be Mr. Bradley, thought we would not be able to establish.

Q. Are you speaking now of what you think Mr. Bradley thought?

A. I am trying to answer your question, Mr. Burr.

Q. Well, if you don't know what it means you can tell me that you do not know?

A. I am telling you what the entry indicates. There are entries all through here indicating credits where there has been evidence of a shortage in the delivery.

By Mr. PAGE:

Q. Have you given all the deliveries now of oil under the two contracts that have been put in evidence from the 31st day of October, 1904, up to the last day you have got in the book?

A. I should say from November 1st, 1904.

By Mr. MATHEWSON:

Q. To when?

A. To December 31st, 1905, both dates inclusive.

By Mr. BURR:

Q. I call your attention to an entry in lead pencil on page 237, in the column headed "Description," reading "H. N. B. says to pass quantity as billed, 6/21/05." Do you know anything regarding that entry?

A. H. N. B. is Mr. Brundage, the auditor of the company, who I presume investigated the same.

Q. I don't want your presumptions. If you know anything about it you may say what you know, otherwise not?

1028 A. Well, Mr. Brundage says in this memorandum to pass the quantity as billed. It indicates he investigated it and instructed the clerk to pass the bill.

Q. Is that his memorandum?

A. That is the memorandum of the clerk who keeps this record.

Q. And from that memorandum made by the clerk you infer that Mr. Brundage gave him the instructions to do as represented in this memorandum?

A. Yes, sir.

Q. What other entries does this book contain showing deliveries under the contracts with the Standard Oil Company, which are in evidence here?

A. Nothing further, Mr. Burr. I think we have got everything that relates to the period covered by Exhibits 93 and 94, for the nominal year ending October 31st, 1905, and the calendar year of 1905.

Q. Under both the oil contracts which have been offered in evidence, City's Exhibit No. 10 and City's Exhibit No. 30?

A. Yes, sir.

By Mr. BURR:

Q. Now this book also contains the account of the coal companies?

A. Yes, sir.

Q. And shows the amount delivered to each company and to each station and of the coal called for by the contracts now in evidence?

A. Yes, sir. What particular contract do you want to see?

Q. Well, take the first coal contract.

A. Exhibit 11?

Q. The first coal contract appears upon that book at pages 82 and 83?

A. No, page 83.

Q. What is shown on page 83 regarding that contract, City's Exhibit 11?

A. I want to establish positively that this is the contract. There is a record of a contract with the dealer for 20,000 tons of generator fuel at $4.45 alongside, Consolidated Company to furnish
1029 guyman, and records the deliveries under that contract.

Q. Are there entries on that page showing to what companies or to what plants that coal under that contract was delivered?

A. Yes, sir. The record indicates the points of delivery of each shipment.

Q. Well, you will either have these read from the pages here, or if you can furnish us with a statement from the books I will take a statement.

Mr. MATHEWSON: We can furnish a statement, Mr. Burr, much more quickly that it can be done here, and I would much prefer to do it. You see taking it month by month for eighteen months it would take an enormous time to do it.

Q. Who makes the entries in this book?

A. The clerk at the general office.

Q. A bookkeeper, is he?

A. Yes, he is a bookkeeper.

Q. I see an entry on page 83 in pencil, "Scale out of order," who supplies the information upon which that entry is made, do you know. The clerk doesn't know anything about it of his own knowledge, does he?

A. I should say he doesn't know of his own knowledge. He probably received information from that particular station to which that delivery was made.

Q. Will this book show whether there were changes in the freight rates or in the mining rates?

A. No, sir, it wil- show whether there were changes in the price of coal.

Q. I notice on page 86, under the column headed "Contracts"——

A. It has no reference to any contract in evidence.

Q. You say there is no contract in evidence with regard to this?

A. In March, 1903?

1030 Mr. MATHEWSON: Point out the period you want to cover.

Q. The contract you have testified to or referred to appears on page 83, March 8, 1904. I presume the others were after that?

A. You will find one on page 102.

Mr. BURR: Well, it is understood that statements are to be prepared of the deliveries under these coal contracts from this book.

Mr. MATHEWSON: Yes.

Mr. BURR: For the time embraced in your statement.

Mr. MATHEWSON: Only you must not expect it to-morrow morning. As speedily as it can be done.

Mr. BURR: And showing the companies to which deliveries were made?

Mr. MATHEWSON: Yes.

Q. Mr. Carter, Complainant's Exhibit 89, "Comparative Con-

densed Balance Sheets," shows in a condensed form the assets and liabilities of the Consolidated Gas Company as of October 31, 1905, does it not?

A. What is the number?

Q. 89, page 371?

A. Yes, sir.

Q. This statement which I hand you and which was furnished by you, Mr. Carter, purports to give in detail the balances for the accounts shown on your general ledger, does it not?

A. Yes, sir.

Q. Can you tell us what accounts were grouped together to produce the aggregate shown in Exhibit 89, and what accounts were eliminated from the trial balance, being the statement which you now have in your hand?

Mr. MATHEWSON: Is that trial balance in evidence?

1031 Mr. BURR: I haven't offered it in evidence. Yes, I want to ask something about it.

The WITNESS: It will take some time to do it.

Q. Can you ascertain that by to-morrow?

A. Yes.

Q. So as to explain the difference in the footings between the two papers?

A. Well, the two papers differ from each other, Mr. Burr, in this respect, that one is a statement of the assets and liabilities and the other is a trial balance sheet; the trial balance sheet shows all of our operating accounts, expense accounts and income accounts, which in a statement of assets and liabilities would necessarily be eliminated.

Q. I call your attention to State's Exhibit E. Taxes for the year 1905.

A. What page?

Q. 411. The item Real Estate $179,778.95. Does that embrace any taxes on the Astoria property?

A. No, sir.

Q. Now the item, Special Franchise, $406,909.23. Was that special franchise based upon the dollar rate or the 80 cent rate?

Mr. MATHEWSON: I object to that as a conclusion. It is in evidence as to when the tax rate was fixed, but the operation of the minds of the State Board of Taxation, we ought not to be expected to explain.

By Mr. BURR:

Q. You are charging against operation 80 cents as it existed prior to that, and under the conditions when you charged the dollar a thousand cubic feet, isn't that so, Mr. Carter?

A. I haven't any knowledge whether the price of gas was taken into consideration. I don't know what they had to do. The franchises were valued as franchises.

1032 Mr. MATHEWSON: The assessment of 1906 of $31,900,000, which is the highest valuation our franchises ever received

was not announced until after the State Gas Commission had fixed the rate for gas at 80 cents, and until long after the Act which was finally passed had been introduced fixing the price at 80 cents to conform to the Gas Commission's report.

Q. The special franchise tax which you have here, $406,909.23, that was imposed during the year 1905, wasn't it?
A. Yes, it was imposed during 1905.
Q. And during 1905——
A. It was a lower assessment than was made in 1906.
Q. During 1906 you were charging at the rate of a dollar a thousand cubic feet of gas?
A. Yes.
Q. And your earnings were based upon that charge?
A. Yes; and I wish to confirm Mr. Mathewson's statement that the assessment in 1906 was increased from the figure in 1905.

Mr. MATHEWSON: From $27,300,000.
Mr. BURR: I object to Mr. Mathewson testifying. I ask to have that stricken from the record.
The MASTER: Motion granted.

The WITNESS: It was increased approximately $5,000,000 in 1906 over 1905.
Q. Wasn't this in fact made up on the second Monday of January, 1905?
A. No, sir. You are referring to the special franchise tax?
Q. Yes.
A. No.
Q. You are quite clear that was the tax that imposed for the year 1905?
A. Yes.
Q. For business done during the year 1905?
A. I don't know anything about that, what it was based on.

Q. Now, referring to the item "Tax on Income from Secu-
1033 rities, $5,257.48." Is that a tax on the securities of other companies held by your company?

A. Other securities, no, sir.
Q. What particular securities does that refer to?
A. It is not a tax on any securities, but it is a tax——
Q. On income?
A. On income.
Q. Well, that is what I mean. It is a tax on income from securities of other companies?
A. It is.
Q. To what extent?
A. To the extent of the amount paid.
Q. Well, this item then of $5,257.48 is a tax on income from securities of other companies?
A. Yes, sir. May I see the statement and confirm that? I don't know what you are reading from.

Mr. MATHEWSON: Which exhibit is that, Mr. Burr? Which exhibit is it you are questioning about?

Mr. BURR: Exhibit M.

Q. The exhibit I have reference to, Mr. Carter, is on page 419, State's Exhibit M.

A. The State's Exhibit M shows the subdivision of the taxes for the nominal year ending October 31, 1905, so as to show the amount applicable to the income during that year on securities owned, and amounted to $5,257.48.

Q. I call your attention, Mr. Carter, to the item on State's Exhibit M, "Tax on Excess Dividends on Amount invested in Securities of other companies, $38,643,590.14, that being the amount invested in the securities of other companies,"—$57,965.39. I want to ask you upon what theory you charge a tax upon those securities against the cost of making gas?

A. We have presented a statement of our operations during the nominal year ending October 31st, 1905, and during the calendar year 1905; among our expenses and taxes we do not make any subdivision of our expenses of any nature, and all our taxes are
1034 charged to tax account, and the taxes paid on our account includes the tax on the revenue from securities that we own, and our expenses including all taxes apply against our revenue of all kinds. A perfectly proper and correct statement.

Q. You have another statement on Exhibit M "Taxes on Excess Dividend on Capital Stock actually employed in Gas Business, $41,356,409.56?

A. What are you reading from, Mr. Burr?

Q. State's Exhibit M. And the tax appears to be $62,034.61. Now, I am asking you why you charge the tax on the securities of other companies against the cost of the manufacture of gas?

A. I have answered the question and I have also stated that there is no tax upon the securities of other companies, but some tax upon the revenue from the securities of other companies which is included in our statement of revenue and against which might very properly be applied that portion of the tax.

Q. Where did you arrive at the figure $41,356,409.86 as the capital employed in the gas business?

A. Well, there is an exhibit numbered, I think, 80——

Q. I notice on Exhibit 80, Mr. Carter, "Investments in the Gas Business" given as $41,356,409.86?

A. I think you are wrong, Mr. Burr. I don't see anything of that sort there.

Q. Look at Exhibit 80, Mr. Carter?

A. I have Exhibit 80 before me.

Q. "Capital Stock Part," does that refer to the $41,356,409.86?

A. Yes, sir.

Q. Now, "Capital Stock Balance," $38,643,590.14. That makes up the total of your $80,000,000, does it?

A. Yes, sir.

Q. Upon what basis did you make that division?

A. No basis in particular. It is a statement of our investments in the gas business, and the sources from which the funds were

derived for making such investments, and that is our best
1035 judgment as to the division of our various resources between our various investments.

Q. Does that division appear upon your books?

A. No, it does not.

Q. Now, calling your attention to the item "Interest on Unpaid Taxes, $94,506.29." That I believe has reference to the taxes which you have refused to pay and which is now in litigation, or which was in litigation?

A. Which are still in litigation, I think, unless they were paid during the year 1905. In fact, I think some assessments were paid in 1905, upon which interest was calculated up to the date of their payment, as appears in the statement before you, and interest on taxes during the year 1905.

By Mr. MATHEWSON:

Q. You are referring now to State's Exhibit M, are you?

A. Not the State's Exhibit M, to State's Exhibit E.

Q. I have asked you heretofore, Mr. Carter, to produce a statement showing the quantity of gas and the price charged therefor, supplied by the subsidiary companies to the Consolidated. In other words, I want the highest and the lowest prices charged for gas by each of these companies to the Consolidated Gas Company during the period for which you have offered the statement now in evidence.

A. I am having such a statement prepared, Mr. Burr. I will probably be able to present that to-morrow.

Q. I have also asked you, at the request of Prof. Bemis, for the amount of work done at the different stations, and the amount of gas produced. I called your attention to that yesterday and you stated that you had not done anything about that.

A. I have not.

1036 Mr. MATHEWSON: I want to call your Honor's attention to the fact that these are requests of Prof. Bemis, for his own information, which is precisely the course taken by Prof. Bemis before the Gas Commission, and I shall object unless it is otherwise pertinent here.

Mr. BURR: Whatever information we have applied for or requested here is for the purpose of enabling our experts to verify the statements produced here by the Consolidated Gas Company, showing as they claim the actual cost of gas for its manufacture and distribution.

The MASTER: I think some of them go a little beyond that, Mr. Burr, don't they?

Mr. BURR: Some of the statements called for go beyond that?

The MASTER: Yes; don't they go a little beyond any cross-examination? I think there were several of them which called for independent information, like this question of coke and coal.

Q. The statements which you prepared and which were offered in evidence before the Gas Commission were true and correct statements I presume, were they not?

A. Yes, sir, everything that I prepared was. I don't know anything about the statements prepared by other people.

By Mr. GANS:

Q. That is true and correct according to the sources from which you took them?

Mr. MATHEWSON: They were true and correct.

By Mr. GANS:

Q. I would like to ask if that is not so?

A. I would testify to the statements that I prepared.

1037 Q. According to the sources from which you took them. That is all you know?

A. I will qualify it that way if you wish.

By Mr. BURR:

Q. The statements prepared for the Gas Commission were prepared in the same way as the statements offered before the Master here?

A. Yes, sir.

Q. That is, you gave instructions to have them prepared from the books, and your instructions were carried out, the statements delivered to you and you testified from the statements. Is that correct?

A. Yes, that refers to such statements as I produced and testified to.

Q. Now, will you take this volume of Printed Papers on Appeal from Order made by the Commission of Gas and Electricity of the State of New York and point out each of the statements therein appearing which were made out by you.

A. You want me to go through this book of exhibits?

Q. Yes, from the point I have indicated.

A. What particular exhibit are you referring to?

Q. Exhibit 98. Did you make out that exhibit?

A. I am of the opinion that it was made out under my instructions.

Q. That exhibit purports to be a statement showing the amount chargeable to Repairs Account of Distribution, month of December, 1904, 14th Street and 21st Street station?

A. Yes, sir.

Q. Is that a true and correct statement from the books of the company?

A. To the best of my belief and knowledge it is.

Q. Exhibit No. 97 appearing on page 38 of the Papers on Appeal, purporting to be statement showing the distributing station expenses for month ending December 31st, 1904, is that a true and

1038 correct statement from the books according to your knowledge?

A. It is to the best of my belief and knowledge.

Q. Exhibit 101 appearing on page 2030, purporting to be a statement of expenditures for replacements, 21st Street station during

December, 1904, is that a true and correct statement from the books of the company?

A. To the best of my belief and knowledge it is.

Q. Exhibit 102 on page 2131 purporting to be a statement showing cost of materials entering into production of gas, read on behalf of complainants, is that a true and correct statement from the books of the company, 14th Street station, year 1904?

A. To the best of my belief and knowledge it is a correct statement of what it purports to be.

Q. Did you compare this statement, also the engineer's statement with the operating ledger figures for the calendar year 1904, 14th Street station, appearing on page 2032 A, of Papers on Appeal marked Exhibit 103 before the Gas Commission?

A. Yes, to the best of my belief and knowledge it is a correct statement and I would like to say in explanation of it that it doesn't undertake to reconcile the figures appearing upon the different records of the company as its heading might indicate. It undertook to explain the difference between the actual cost for the period covered by the statement with the purely academic statement, if I may use that expression, made up from data furnished by Senator Page.

Q. Exhibit No. 104 appearing on page 2033 purporting to be a statement of operations of the Consolidated Gas Company for the nominal year ending October 31, 1905, is that a true and correct statement from the books of the company prepared by you?

1039 A. To the best of my knowledge and belief, yes. It was prepared by my directions, not by me personally.

Q. Exhibit No. 105, appearing on page 2034 A, purporting to be a statement of gas made——

Mr. MATHEWSON: Now, you know that that is precisely the statement that we are making up for you, with two additional months. Is this necessary?

Mr. BURR: I am simply asking him if it is a correct statement.

Q. (Continuing:) —gas made for the Consolidated Gas Company by other companies, net, for the nominal year ending October 31st, 1905. Was that a true and correct statement prepared from the books of the Consolidated Gas Company, prepared by you, and produced and offered in evidence before the Gas Commission?

A. I shall always have to qualify your statement, so far as it says "Prepared by me." It was under my direction, and is correct to the best of my belief and knowledge.

Q. And that applies to all the statements presented here by you, does it not, the same thing?

A. The same thing.

Q. Exhibit No. 110, at page 2035 of the papers on appeal, purporting to be labor account 14th Street station works, from November 1st, 1904, to October 31st, 1905?

A. I know nothing about it.

Q. That was prepared by the Engineering Department, was it?

A. I presume so; I do not know.

Q. And the same would apply to Exhibit No. 114, being the same statement regarding the 21st Street station works?

A. All I can testify is that it was not prepared under my direction; that is all I know about it.

Q. You do not know whether it is correct or not?

A. I do not.

1040 Q. The exhibit purporting to be a statement of assessed values for 1904, appearing at page 2047 of the papers on appeal, was that prepared by you, and is that a true statement from the books of the company?

A. I think that statement was prepared under my directions.

Q. And it is a true statement to the best of your knowledge, is it?

A. Yes, I assume that it is correct.

Q. Well, is there any one of these statements that you have absolute positive knowledge of, that you would swear positively that it is correct, or do you simply presume or assume that they are correct?

A. No, I have not enough confidence in typewriters and printers to swear to anything appearing on these pages as absolutely correct, not for a minute.

Q. Exhibit No. 124, appearing on page 2048, purporting to be a statement of additions to plant, property and construction for the ten months ending October 31st, 1905; was that a true and correct statement prepared by you, under your direction from the books of the company?

A. I have no doubt it was prepared under my direction, and to the best of my belief and knowledge it is a true and correct statement of the facts it purports to give.

Q. Apropos of your remark about mistakes, you are aware that this volume was prepared by the counsel for the Consolidated Gas Company, are you not?

Mr. MATHEWSON: That is all in evidence.

Mr. BURR: I asked him if he is aware of it.

Mr. MATHEWSON: I think it says so on the cover.

The MASTER: Is that the appeal book?

Mr. BURR: Yes.

The MASTER: You asked him about that the other day, in reference to some other matter, and that was put on the record then.

1041 Q. Exhibit No. 125, appearing on page 2061, purporting to be a statement of gas made at all stations for the nominal year ending October 31, 1905; was that prepared by you or under your direction, and is it a true and correct statement from the books of the company?

A. I have no doubt it was prepared under my directions, and to the best of my knowledge and belief it is a correct statement.

Q. Exhibit No. 126, appearing upon the same page, purporting to be a statement showing the station cost, 14th Street station, plus the *pro rata* share of the distributing expenses for the year ending October 31, 1905, was that also prepared by you or under your direction, and is it a true and correct record from the books of the company?

A. That was prepared under my directions I believe, and to the best of my belief and knowledge it is a correct statement.

Q. And the same applies to Exhibit 127, appearing upon page 2063, purporting to be a statement showing the station cost plus the *pro rata* share of distributing expenses for the 21st Street station?

A. Yes.

Q. Does that also apply to Exhibit No. 128, appearing at page 2065, purporting to be a statement of materials and supplies used at the 21st Street station December 31, 1904?

A. I will reply affirmatively to that; the same answer as with respect to the others.

Q. And as to Exhibit No. 129, appearing at page 2066 of the papers on appeal, purporting to be a statement of material and supplies used at the 14th Street station, December, 1904; is that a correct statement prepared by you or under your directions?

A. It was prepared under my instructions, and I have no reason to believe that it is not a correct statement.

1042 Q. I call your attention to Exhibit No. 130, appearing at page 2067, purporting to be a statement showing details of the production cost, 14th Street station. Did you prepare that statement, or was it prepared under your direction, and is it a true and correct statement from the books of the company?

A. I do not recognize that statement as anything emanating from the accounting department.

Q. It is apparently issued from the superintendent's office, isn't it?

A. From the superintendent's office at the 14th Street station.

Q. You have no knowledge of that statement?

A. I have no knowledge of that statement.

Q. You did not prepare it?

A. I did not.

Q. Did you prepare the statement purporting to be a summary of labor accounts, 42d Street station?

A. No, sir.

Q. Or any of those statements of labor account?

A. None of them.

Q. Did you prepare the statement purporting to be an analysis of the increase in cost of manufacturing coal gas, 4th Street station, September, 1905, compared with September, 1904, as it appears there marked Exhibit No. 143, on pages 2076, 2077, 2078, 2079, 2080, 2081 and 2082, embracing all the stations?

A. I think those statements were presented by me. I believe them to be correct so far as they go, but, as was very plainly testified to at that time, they are not complete and are of no value, I think, in arriving at the total cost of gas for the period they purport to cover.

Mr. BURR: I move to strike that out. I simply asked if they were prepared by him.

The MASTER: Strike it out if you like; it is not responsive, but if it is of any importance it only means that Mr. Mathewson will ask it on redirect, and there you are. I believe in saving time if you can.

1043 Mr. BURR: Let it go as it is then.

The MASTER: It is stricken out.

Q. Exhibit No. 144, appearing on page 2082A, purporting to be

a detailed statement of operation of all stations by months and carried out to a total for the nominal year ending October 31st, 1905; was that prepared by you or under your direction, and is it a true and correct statement from the books of the company?

A. To the best of my belief and knowledge.

Q. Exhibit No. 145, purporting to be a summary of operations for the nominal year ending October 31st, 1905, appearing upon page 2083 of the papers on appeal; was that prepared by you also, and is that a true and correct statement from the books of the Consolidated Gas Company?

A. You confine your question to page 2083?

Q. To page 2083 and the following pages.

A. The statement was prepared under my directions and by order of the Commission, and I believe it is a true and correct statement.

Mr. GANS: You can compare the totals to see that they fit with the totals of Exhibit No. 93, which purported, I think, to be complete.

Mr. MATHEWSON: No, they were not made to fit all of them, this particular one that he is calling attention to.

The WITNESS: This statement is correct to the best of my knowledge.

Q. You have refreshed your recollection by looking at some memorandum?

A. No, I have not, because I have not been able to find any memorandum by which to refresh my memory.

Q. Exhibit 136, purporting to be a statement showing
1044 prices charged per load for coke and screenings, appearing on page 2130, was that prepared by you?

A. Under my directions.

Q. And is a true and correct statement from the books of the company?

A. I believe so.

Q. Then does that apply also to Exhibit 147, appearing on page 2137, purporting to be prices of meters and discounts allowed?

A. Yes, that also; with this explanation—if I may be allowed to make it; at that time the prices given of the meters included what is considered a part of the meter, and that is the cap and swivel. In some figures that I have made up showing the cost of some of our property, in using a price per meter, I have used a price which eliminates the cap and swivel, because they are part of the connections which are carried in another account, and therefore between this price and some prices that I quoted you the other day you will find a slight difference amounting, in the case of a three light meter, to 12 cents; that is, cap and swivel at 6 cents each, making 12 cents. The price I gave for a three light meter was $4.38; in this case it appears as $4.50. In this case the cap and swivel is included.

Q. With that explanation, it is a true and correct statement, is it?

A. Yes, sir.

Q. Exhibit No. 148, purporting to be answers and questions asked before the Gas Commission on December 11th, 1905, was that prepared by you?

A. Under my direction.

Q. And they are true and correct answers, to the best of your knowledge and belief?

A. Yes.

Q. Exhibit No. 149, purporting to be a statement of plant and operations for the nominal year ending October 31st, 1905, appearing at page 2139 of the papers on appeal; was that also prepared under your direction and is it a true and correct statement from the books of the company?

1045 A. Those figures were obtained from the Street Department and I assume them to be correct.

Q. By whom were they prepared in the Street Department?

A. By a clerk in that department. At any rate, very full testimony has been given respecting the mileage of mains at this hearing.

Q. I am asking you now with regard to this, do you know whether it is a correct statement prepared from the books of the company?

A. It is, to the best of my knowledge and belief; I have no knowledge that it is not correct.

Q. Exhibit 150, appearing at page 2157 of the papers on appeal, purporting to be an index of maps of real estate of the Consolidated Gas Company; was that prepared by you, and is it true and correct, showing the block, lot and assessed valuations, land, 1905, and assessed valuation with improvements, 1905?

A. I do not recall whether that was prepared under my direction or not; I think it was.

Mr. MATHEWSON: What does it purport to do?

The WITNESS: It purports to divide our real estate as assessed between the different stations, locating it as part of East 18th Street tank yards, Irving Place office, and part of 21st Street station. I think quite likely it was prepared under my direction.

Q. I do not like to take an answer like that. Can not you state whether it was or not. It is quite an important paper here, and you must have some recollection in regard to it. It appears as an exhibit. Is it, to the best of your knowledge, information and belief, a correct statement made from the books of the company?

A. No, this is not made from the books of the company at all. It is a copy of the tax bills.

Q. Is it a true and correct copy of the tax bills?

1046 A. I believe so; the assessments levied upon the property, I believe it is, if it covers all the property. I take it that it does.

Mr. MATHEWSON: Do you know anything more about it than you have stated?

The WITNESS: No, I cannot add anything to what I have stated.

Q. Exhibit 151, appearing at page 2167, purporting to be trial balance of the National Coke and Coal Company, October 31st, 1905; was that prepared by you or under your direction?

A. I think not.

Q. Do you know by whom it was prepared?

A. As far as the preparation of the statement was concerned, I should surmise that it was prepared by one of the clerks of the National Coke & and Coal Company.

Q. Do you know whether it is a true and correct statement?

A. I do not.

Q. Does that also apply to Exhibit No. 152, purporting to be a statement of dividends paid by the National Coke and Coal Company, since its organization, January, 1901?

A. The same answer applies to it.

Q. It was not prepared by you?

A. It was not; I should say it was prepared by one of the clerks of the National Coke and Coal Company, but the $27,500, total amount of dividends paid to the Consolidated Gas Company, strikes me as a familiar figure.

Q. That would appear upon the Consolidated Gas Company's record?

A. That would appear on the company's records. I recognize the amount as the amount we have received in dividends from them, but as to the dates and when they were paid I cannot testify, as to their correctness.

Q. But they are correct to the best of your knowledge?

A. The total is correct.

1047 Q. And the dates?

A. I could not testify to them.

Q. Exhibit No. 156, purporting to be a statement of sales by feet each year from November 11, 1884, to December 31, 1904, of gas; is that also correct and was that prepared by you or under your directions?

A. Under my directions.

Q. And is it a true and correct statement from the books of the company?

A. To the best of my knowledge and belief.

Q. Exhibit No. 157, appearing on page 2172, purporting to be a statement showing the amount of repairs and depreciation from November 11, 1884, to December 31, 1904, inclusive, and the cost per thousand cubic feet sold; is that a true and correct statement prepared from the books of the company by you or under your direction?

A. Prepared under my direction and correct to the best of my belief and knowledge.

Q. Does that apply also to Exhibit No. 158, appearing on the same page, giving in detail the repairs and replacements and depreciation?

A. It was prepared under my direction and I believe it is correct.

Q. Exhibit No. 159, appearing at page 2175, purporting to be a statement of the Consolidated Gas Company showing construction work during the calendar year 1905, replacing dismantled apparatus; is that a true and correct statement prepared by you or under your direction from the books of the company?

A. It was prepared under my directions and it is true to the best of my knowledge and belief.

Q. Exhibit No. 160, appearing on page 2177, purporting to be

a statement of the sales during each year from November 11, 1884, to December 31, 1904, and average price received per thousand cubic feet sold, is that a true and correct statement prepared by you
1048 or under your direction from the books of the company?

A. Prepared under my directions.

Q. And is a true and correct statement?

A. I believe so.

Q. Exhibit No. 162, at page 2179, purporting to be a statement showing the distribution expense, save taxes, and the feet of gas sold in the eight Boston companies, including the pipe lines; that was not prepared by you?

A. No, sir.

Q. Exhibit No. 170, appearing upon page 2196 of the papers on appeal, purporting to be summaries of the Consolidated Gas Company, years 1900 to 1904, inclusive; were those summaries prepared by you from the books of the company and are they true and correct?

A. They were summaries prepared under my direction, and they are correct to the best of my knowledge and belief.

Q. Exhibit No. 171, appearing at page 2208, purporting to be a statement of sales of gas made at the Consolidated Gas Company and outside companies for four months ending October 31st, 1905; is that a true and correct statement made by you or under your direction, from the books of the company?

A. Made under my directions, and I believe it to be correct. I would like to make one suggestion in regard to it. I do not like the way the heading is phrased; it looks to me as if there was a word left out. I think it should be "Sales of Gas Made at Consolidated and Outside Companies' Stations."

Q. That is what it purports to show, I guess?

A. Yes.

Q. Exhibit No. 172, appearing on page 2209 of the papers on appeal, purporting to be a statement of the status of real estate, plant and property of the Consolidated Gas Company, as shown under the following headings, on the books of the company, "As per schedule, June, 1884, additions to 1884, total November 11,
1049 1884; status December 31st, 1904," and "increase." Was that prepared by you or under your direction, and is it a true and correct statement made from the books of the company?

A. To the best of my knowledge and belief.

Mr. MATHEWSON: We have got that already in evidence.

Q. Exhibit No. 173 is a true and correct statement also, is it?

A. I believe it to be, yes.

Q. Exhibit No. 174, appearing at page 2210A of the papers on appeal, purporting to be a statement of the variation in real estate, plant, property and construction from date of consolidation, November 11th, 1884, to October 31st, 1905; was that prepared by you or under your direction, and is it a true and correct statement from the books of your company?

A. Prepared under my direction, and I believe is a correct statement.

Q. Exhibit No. 175, appearing at page 2211, purporting to be a

statement showing amounts expended for repairs in the construction for the Consolidated Gas Company, November 11th, 1884; was that prepared by you?

A. That is my belief, yes.

Q. Exhibit No. 176, purporting to be a comparative condensed balance sheet of the Consolidated Gas Company, October 31st, 1905,—November 11th, 1884, showing variations; is that a true and correct statement prepared from the books of the company?

A. I believe it to be so.

Q. Was it prepared by you or under your direction?

A. Under my direction.

Q. Exhibit No. 177, purporting to be a statement of the assets and liabilities October 31st, 1905; was that prepared by you or under your direction?

A. Yes.

Q. And is it a true and correct statement from the books of the company?

A. To the best of my knowledge and belief.

1050 Q. This, I think, we have already, but I will ask you in regard to it: Exhibit No. 179, dividends calculated at 8%, was that prepared by you?

A. Under my direction.

Q. And is true and correct, is it?

A. To the best of my knowledge and belief.

Q. Complainant's Exhibit No. 94 is headed "Summary of Operations for 1905." Is not every item of expenditure on that exhibit applied to the quantity of gas made and gas sold, producing in detail the cost of gas sold, apparently, of 74.81 cents per thousand cubic feet of gas?

A. That is the case.

Q. From that statement on Exhibit 94 will you prepare another one showing the cost of making and selling gas by your company independently of its other operations? By that, I mean independently of its relations to other companies or its investment in the securities of other companies.

Mr. MATHEWSON: That does show it; there is no investment in the securities of other companies there; you cannot make up such a statement as you have presented, if I understand what you have in mind.

Mr. BURR: Every possible item that can be charged to the operations of the Consolidated Gas Company is charged on Exhibit No. 94 as against the cost of a thousand cubic feet of gas.

Mr. MATHEWSON: Oh, no.

Mr. GANS: I think what Mr. BURR means is this. The witness has testified that there is an item in Exhibit 94 which he concedes is not a part of the cost of making gas.

Mr. MATHEWSON: That is a matter of argument.

Mr. GANS: I think what Mr. Burr wants him to make up is a statement of the items which he claims do not enter into the cost of making or distributing gas.

1051 Mr. MATHEWSON: We shall not do that unless instructed; it would create a false impression and one which might be

quoted against us. If Mr. Burr wants that done it seems to me it is a matter of argument—but if Mr. Burr's proposition is to make up a statement of the cost to the Consolidated Gas Company only the cost of making and distributing gas, we cannot do it, because the gas acquired from other companies passes through the distribution, and it is in there and you cannot get it out. You have got to divide your distributing expenses by the total cost of distribution.

Mr. BURR: I think I might simplify this if I might be allowed to put one question:

Q. Do you claim that every item on Exhibit No. 94 is a proper charge against the cost of manufacturing a thousand cubic feet of gas?

A. I presume you are referring to the matter of taxes, and that is a matter of argument, that I think is generally conceded, as to whether we ought to make some division of our taxes.

Q. You stated a while ago that this exhibit only shows the summary of operations, didn't you?

A. I do not remember making any statement of that kind.

Q. Can you prepare an itemized statement from your summary of operations, as shown by Exhibits No. 93 and 94, in support of the contention of the bill of complaint, at page 21, that during the year 1906 a sum in excess of 70 cents per thousand cubic feet should be allowed as the annual reasonable cost of manufacturing and distributing gas.

Mr. MATHEWSON: We shall not present such a statement unless we are instructed to. That also is a matter of argument which on facts may be presented to the Master.

1052 Mr. BURR: I would like to get a statement of facts upon which the claim is made, or the figures.

Mr. MATHEWSON: I think when we get through here you will have all the facts you are looking for.

The MASTER: This is premature anyway; the witness has not yet said that he could make such a statement.

Q. Can you, Mr. Carter?

A. I do not know just what you want, I am sure. We have made a statement here, and are rather pinning our faith to the statement we have made. If you want it rehashed in some other form, I shall be very glad if you will get one of your accountants to do it.

Q. We are anxious to get the statement in a different form?

A. You have the figures there. I cannot prevent your reconstructing them in any form you like.

Q. But you made the claim and I should like to see what you have to support it.

Mr. MATHEWSON: Why do you insist upon our proving our case?

Mr. BURR: Because that is your duty, I think.

Mr. MATHEWSON: Well, we shall in due course.

The MASTER: Proceed, gentlemen; let us take up another subject.

By Mr. GANS:

Q. Possibly I might clear this up by asking one question, and that

is, whether Exhibit No. 94 purports to be a statement of the items which according to your contention, enter into the cost of manufacturing, distributing and selling gas, and all of the items which enter into it. You may be able to answer that question. I
1053 do not know whether you can or not.

A. It is a statement of all our expenses, I have already stated so, as they appear in our books, and the statement has been subject to the confirmation of the City's expert and the State's expert, and you have got all the information then that we have got on the subject.

Q. It is a statement of all your expenses, divided by the cost of manufacturing and selling?

A. That is what it is.

Mr. MATHEWSON: If it is not, we shall show what the others are before we get through.

Mr. GANS: I wanted to know whether we had them all now.

Q. In addition to "expense" it includes one charge on your books at least which does not represent money paid out, does it not?

A. An anticipated item of expense.

By Mr. BURR:

Q. Have you a statement anywhere showing in detail the acquisition of the stocks of the electric light companies and the subsidiary gas companies?

Mr. MATHEWSON: Has not that all been covered in great detail? My recollection is that it so appears.

The MASTER: I do not know how much detail; I know it was gone into.

Mr. BURR: I want to investigate into it particularly. It is a very important item here, of many millions of dollars charged up against the cost of gas.

Mr. MATHEWSON: No, not a dollar is charged against the cost of gas, and not a dollar of our investment in the securities of
1054 other companies, except the Astoria and the National Coal and Coke Company, do we claim the right to earn a dividend upon.

Mr. BURR: You are asking the community to pay a dividend upon your total capitalization, basing it upon your interest in these electric light companies.

The MASTER: This is all very nice, but premature. I will forget it before I come to decide the case. You may as well defer it and put it in your briefs. If this matter has been gone into before, the issue of these stocks, as my recollection is that it has, it is not necessary to amplify it.

(Here Mr. Mathewson refers the Master to page 408 of the Book of Exhibits.)

Mr. MATHEWSON: Just what stock was issued for each, and at just what premium it was issued; all that appears.

Mr. BURR: This is merely a summary or a general statement. I want to cross-examine this witness in regard to the business of dealing in investments of other companies. This company is engaged in

three businesses. One is the gas business, another is dealing in securities of other companies, and the other is construction business. I desire to proceed to cross-examine him in regard to the securities of other companies, the acquisition of its securities, the manner in which they were acquired, why they were acquired, and of what benefit they are to the Consolidated Gas Company as a gas company, and in what respect they affect the consumer of gas in the City of New York.

Mr. MATHEWSON: There is a more extended statement to which I did not call his attention.

The MASTER: Counsel calls my attention to a further state-
1055 ment at page 382A of the book of exhibits. Is that sufficient for your purposes, Mr. Burr?

Mr. BURR: We have before us this situation. You remember some little while ago I asked Mr. Carter, the Secretary of this company, if he knew why this company had gone into the business of acquiring securities of other companies, electric light companies. He said he did not know why. Now, I purpose showing, if I may, by this witness, that this was an entirely new business that the gentlemen who had been connected with the Consolidated Company embarked in, that it was not a necessary part of the gas business, and it did not add anything to the gas making qualities of this company, but enabled them simply to go into a stock speculation; interest upon the stocks and bonds being charged up directly or indirectly against the gas business and where the money was invested. In other words, that the gas making plant or gas business—the money that is actually invested, whatever it may be, in the gas business—is compelled to pay dividends upon the stocks of these other companies. Here we have a situation where the gas making business pays 6 or 8 or 10 per cent. and the stocks and securities of the other companies realize admittedly but 1½ to 2 per cent.

The MASTER: Cannot you make your argument along those lines based on the facts already in evidence to which I have called your attention? You have got the figures here, the different issues, and I suppose somewhere or other in the other exhibits the amounts of dividends on these various stocks also appear. What I want to avoid is this undue prolixity. It seems to me on a question of that kind you could present your argument just as well on the totals
1056 as you could by spending two or three days here on matters of detail. I want to call counsel's attention to this fact: up to and including last night out of about 1,000 pages of this record over 33 1-3 per cent. of them have been occupied by Mr. Burr's examination of Mr. Carter. The same proportion obtains as regards the number of hours. Over one-third of the time actually spent in this reference thus far has been taken up by counsel for the city's cross examination of Mr. Carter. Now one of these days there will be a day of reckoning. There are other counsel in this case who have further witnesses, I assume, to cross examine, and I want to throw out a note of warning to the effect that some time when an application is made by somebody or other to the court for an extension of time, the matter will be gone into, I will be required

to certify about it and somebody's time will be cut down. The Court will cut out somebody and say, Gentlemen you have had Mr. So and So on the stand, his direct examination was finished in one day, you have been four days cross-examining, you must finish your cross-examination in one more hearing. That will work injustice to some one or the other of you. I merely call attention to that fact now so counsel can arrange among themselves to apportion this time, because it seems to me to take over one-third of the entire time of this hearing thus far in the cross-examination of one witness on matters of statistics where the argument is based on figures is an undue expenditure of time.

Mr. BURR: Permit me to say, Mr. Master, in that connection, that this is a most unusual case and cannot be judged by the rules of procedure in any other case that I know of. They present
1057 here elaborate statements covering a whole year or a nominal year showing items aggregating probably 100 or more which enter into, or are alleged to enter into the cost of the distribution of gas. A proper subject of cross-examination is every item that they allege goes to that end, which tends to add the smallest fraction of a penny to that, and if my cross-examination has wandered outside of that, my time should be limited, but if I have confined myself to an examination along that line, trying to ascertain what are the real facts and true situation in that regard, I don't think the Court will limit my time because of that. I have tried to hew strictly to the line, but the difficulty has been, as your Honor will know and will realize if called upon to make a finding, that from time to time our cross-examination has had to go over because we were obliged to call for statements from time to time in order——

The MASTER: Yes, and a great many of those statements they were not called upon to prepare, in my judgment. They were for your information.

Mr. BURR: On the contrary, I think it was for their accommodation that we asked for the statements instead of the original books.

The MASTER: To some extent, but when you call upon a witness on the stand to examine the minutes with a view to finding out whether Mr. Bradley ever made a report on a certain subject, after he says he does not know. That is not in my opinion, cross-examination. You have exhausted your cross-examination when you find out that he does not know. And the same is true of a number of other questions. The witness as a matter of courtesy has devoted time outside to preparing these statements. This afternoon,
1058 for instance, we have spent nearly an hour in getting identified these various tabulations from that other record.

Mr. BURR: I am entitled to do that for the purpose of comparison.

The MASTER: I understood there was no objection on the part of counsel on the other side, at least to stipulating those in and that it was counsel for the defendants who objected to so doing. If you wanted the correctness of them admitted, they could have been admitted in a bunch, I have no doubt, because I so understood, and Judge Lacombe so assumed in his opinion.

Mr. BURR: I call your attention to this, that I asked Mr. Carter if these statements were prepared by him and he said "you must be more specific, I can't answer a general question like that," and I was obliged to call his attention particularly to which exhibit or statement was meant.

The MASTER: Possibly his counsel would have made a stipulation that would have answered that same purpose. You of course have the right to examine fully along the lines you have indicated. I do not intend to restrict you in that right; you are entirely within your rights. My only suggestion is I don't think the cross-examination has been made as concise as it might have been and I think the time has been unnecessarily consumed. I merely call attention to that fact, not for your account especially, but because it affects the rights and interests of the other parties to the cause; it will very shortly, as I understand Mr. Mathewson has obtained an extension of his time.

Mr. MATHEWSON: Ten days.

The MASTER: I was required to make a certificate on that
1059 point; it expires the 25th. Undoubtedly there will be a question of a further extension and further time for the complainant's case, and this matter of cross-examination as it appears here may be embarrassing to other counsel.

Mr. MATHEWSON: Mr. Master, I wish you would permit me to say just a word in response to what Mr. Burr said in reference to this particular line. The laws of the State of New York expressly authorize this company to acquire the stocks and securities of other companies. We have done so. It is not a stock jobbing business. Secondly, on Exhibit No. 80, which you have before you, is stated what we have invested in the gas business and, separately, that which is invested in other securities. The amount invested in other securities we do not claim a right to earn upon from the consumer of gas. We merely claim a right to earn upon our investment in the gas business, the value of the property we have invested in the gas business, properly invested. What the securities of these other companies may produce is something entirely aside. We are claiming on values, not on pieces of paper at all.

Mr. BURR: You have increased your capital from $39,000,000 to nearly $100,000,000 by the acquisition of these other companies.

Mr. MATHEWSON: Supposing we have, that does not give us a right to earn on it unless this property is invested in the gas business and we do not claim a right to earn on it unless it is so invested. It will be simply wasting time because you are setting up a windmill and then fighting it, to say we do that. Let me show you, Mr. Mas-
ter, Exhibit No. 96 in evidence. That shows that we drew
1060 from surplus to pay our dividends last year $1,946,000, and that we did not earn out of the consumers of gas, even if we did pay on a par of $80,000,000; but whether we did or not our claim is that we are entitled to earn upon the investment, the value of our property investment in the gas business.

The MASTER: Those are all matters of argument and may or may not be so. My point is that it does not appear to me now why any

argument that you have on that subject cannot be based on these totals here. I do not see any point in going into further details about it because it appears here exactly what they have got invested in the securities of other companies and they either are or are not entitled to pay any attention to them in figuring on the cost of gas.

Mr. BURR: I hope you do not think, Mr. Master, for a minute that I have been sitting here in this extremely hot weather asking unnecessary questions voluntarily or intentionally.

The MASTER: No, I do not, but I don't think you have made as good time as Senator Page did with his cross-examination.

Mr. BURR: The Senator has not finished.

The MASTER: Then I may withdraw that remark.

At 5:25 P. M. adjourned to August 22, 1906, at 1:30 P. M.

Last Exhibits:

Complainant's 100.
State's N.
City's 34.

1061 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, WEDNESDAY, *August 22nd*, 1906—
1:30 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Burr, Mr. Page, Mr. Gans.

1062 Mr. BURR: There is a correction on the last page of yesterday's hearing. The word "unintentionally" should be "intentionally."

The statement made at yesterday's hearing by counsel for the complainant Gas Company, that as to the amount of capital it had invested in securities of other companies, it did not claim a right to earn upon from the consumer of gas is a tribute to his common sense and legal acumen; if he and his witnesses will be equally frank and open with regard to the expenditures and disbursements of his company, it will simplify this inquiry to a very great extent.

In view of the fact that the Bill of Complaint emphatically states that the actual cost to the complainant of making and distributing

gas was more than 70 cents per thousand cubic feet, and that Exhibits 93 and 94 were so made up as to show in detail the items of disbursements, to each one of which, the factors of gas made or gas sold, was applied, producing in the totals an "operating" cost of 72.12 cents on Exhibit 93, and an "operating" cost of 74.81 cents per thousand feet of gas sold on Exhibit 94, we did suppose, and think we had a logical right to suppose that it would be the contention of the complainant that those figures represented the true cost of vending gas in New York during the periods embraced in the exhibits named.

As the complainant denies any right to earn from gas consumers any dividends on its capital invested in the securities of other companies, it follows as a matter of course that any disbursements made by it which were made in whole or in part by reason of such investments, must be eliminated from any exhibits which upon
1063 their face purport to show, by fair implication, the cost of gas.

Exhibit 80 shows the complainant's view as to the proper division to be made of its assets between those invested in the gas business and those invested in the securities of other companies, and Exhibit 81 shows from its point of view, its investment in the gas business alone, with the conclusions arrived at by these exhibits, we are by no means in accord, but they do clarify the situation to this extent, that as to a certain large portion of its assets, they have been eliminated from the controversy, considering the statement made by counsel yesterday.

All that we now ask is that the same process of elimination be made as to items of expenditure shown in Exhibits 93 and 94, which counsel must be aware must be eliminated in arriving at the true cost of selling gas.

We are aware of the fact that we will not be able to agree with counsel as to the propriety of all the items he decides to contend are applicable solely to the cost of gas, but there will of a certainty be no controversy over those he decides to eliminate, if any.

We have a right to inform ourselves, and in the performance of our duty we are bound to inform ourselves as to every item of operating charge shown in Exhibits 93 and 94 on two points:

1st. That the expenditure was actually made and

2nd. The precise nature of the expenditure to the end that we may determine from our point of view, whether as a whole or in part it should not be charged against the investment in other
1064 securities, rather than against the cost of gas.

This is the information we must surely possess, and it depends very largely upon the complainant's counsel and witnesses whether we get it speedily and clearly or are obliged to get it piecemeal, and at the end of a tedious cross-examination.

It must be apparent that the only source of information as to the nature of the expenditures made by the complainant, and shown in some detail on Exhibits 93 and 94 are contained in the books of account and vouchers of the complainant, and it is from that source that information must come to properly defend this suit. From that source the complainant compiles such statements and presents as

exhibits such an arrangement of the figures as it believes will support its contention. With this we have no quarrel, but merely seek the same source of information for the purpose of preparing our own statements to support our own contention, and with that the complainant should consistently have no quarrel.

We will state now that we want the same kind of analysis of every doubtful account—doubtful we mean as to whether it is in whole or in part a proper charge against the cost of selling gas in our opinion, as we have in State's Exhibits "E" and "M" with regard to taxes, and it remains with the complainant's counsel and the Master to determine how we may most speedily obtain this.

If the accountant for the State has fully covered this in the examination made by him there is no necessity for our duplicating his work, but if we find on his statement being submitted that further examination is needed for the purpose, we reserve the right
1065 to have such examination under the ruling previously made by the Master.

Mr. MATHEWSON: Referring to the colloquy at the conclusion of the last session as to the attitude of the Consolidated Gas Company, only a portion of it seems to have been taken by the stenographer, and that which was taken contains some verbal inaccuracies so far as my statement is concerned. That there may be no misunderstanding, I re-state our position, as follows:

The Consolidated Gas Company claims that the capital which must be taken into consideration in determining the price which it may charge for gas, comprises the value of all its assets, intangible such as franchises and good will, as set forth in the bill of complaint, as well as tangible; excluding, however, from such assets the company's investment in the stocks of other companies (outside of the Astoria Light, Heat and Power Company and the National Coal and Coke Company), such investment at book value being covered under the heading "Investment in Securities of other Companies" appearing at the end of Complainant's Exhibit 80.

Now, in reference to the discourse that has been delivered by my brother Burr, I do not see anything in it whatsoever. We have been entirely frank. They are now examining the books and the records to show whether Exhibits 93 and 94 are correct or not and nothing has been questioned.

The MASTER: I do not understand that he is making any point except to get his position straight upon the record. As I understand it, he intends to await the reports of the experts before
1066 making an examination, or he may not make any at all. Is that the situation?

Mr. BURR: That is the situation.

Mr. MATHEWSON: May I make one more statement; he seeks to criticise us because we have not so far shown the items which make up the 70.02 cents which he says we claim should be charged to the cost of gas for 1905. He is merely trying to compel us to try our case in advance of witnesses not yet called. Witnesses will be called who will show exactly how that amount is made up, but it is not Mr. Carter who made up the account, and he is not the witness who could state it.

Mr. BURR: He is the witness who presented the statement on which we are cross-examining.

Mr. MATHEWSON: The statement from which he was cross-examined was the actual payments by the Consolidated Gas Company for the periods in question. In addition to that, if you will remember, we stated to the Gas Commission, and everybody concedes that we are entitled to an allowance on the cost of gas sufficient for those years to equalize our disbursements for repairs and replacements, with the average at least of the previous twenty years, that year having been abnormally low; therefore that statement does not contain everything which is properly chargeable in computing the amount to be allowed for the cost of gas.

The MASTER: Now, you are both all right on the record, let us proceed.

Mr. GANS: We asked for a copy of the map a month ago. When are we to get it?

Mr. MATHEWSON: Three copies of the map were brought down and distributed to counsel, and Mr. Francklyn says that one was distributed to Senator Page and Mr. Gans, which apparently
1067 has gone astray. I have another one here which I will lend them, pending the making of another copy for them.

Mr. PAGE: I think Mr. Francklyn sees visions and dreams dreams.

Mr. GANS: We asked possibly two or three weeks ago for some Astoria contracts and we have been clamoring for them ever since, or clamoring for some adequate statement of their contents which would enable us to prepare for cross-examination when the time comes.

Mr. MATHEWSON: We had the entire contracts down here, two big dress suit cases full of them, for a day or two. Mr. Bradley was then injured and is out of the city at present recovering, and he has not had an opportunity to make up such a statement as you require.

Mr. GANS: We want it to be clear, when the time comes, that we have been asking for these contracts for cross-examination.

Mr. PAGE: When the time comes that we have to do that, we do not want it to be claimed that we have been delaying.

WILLIAM H. WHEELOCK, called as a witness on behalf of the Complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Will you state your business?

A. Real estate.

Q. Are you connected with any firm or concern in that business?

A. I am a stockholder and director in the corporation of Douglas Robinson, Charles F. Brown & Company.

Q. Where are they located?

A. No. 160 Broadway and No. 570 Fifth Avenue, New York City.

Q. When was that company organized?

A. Incorporated January 1st, 1905.

1068 Q. With whom were you associated prior to that time?

A. With the firm of Douglas Robinson, Charles S. Brown & Company.

Q. What was your position in that concern?

A. I had charge of the brokerage of the down-town business, the main brokerage business.

Q. At the sales department?

A. Yes.

Q. And prior to that association with that firm of Douglas Robinson, Charles S. Brown & Company, with whom were you connected?

A. Douglas Robinson & Company.

Q. In what capacity?

A. I first had charge of the buildings that they managed for estates; afterwards as a broker, for four years.

Q. What have been and are your duties in connection with these various positions which you have occupied?

A. Taking practically charge of sales or purchases of clients of the office, and keeping track as far as possible of sales made by the brokers, together with appraisal business.

Q. Within what territory?

A. In Manhattan Borough.

Q. Have you kept yourself familiar with the records of sales and purchases made through your office during this time?

A. Yes.

Q. And with any other sales?

A. So far as possible, those recorded, and those that I could learn of.

Q. How about considerations that have been paid or received in case of sale through your office or otherwise; have you made any investigation in reference to those?

A. I know the considerations received.

Q. Have you in your office any maps or data in reference to sales which are made in the city, or have been for years past?

A. I have a set of insurance maps which are kept up to date as far as possible, from The Record and Guide, and also from information that we have been able to secure.

1069 Q. Have you access to those records?

A. At all times.

Q. Are you familiar with them, or do you keep familiar with them from time to time?

A. Generally.

Q. Have you ever appraised property?

A. Yes, for the last five years.

Q. On the Island of Manhattan?

A. Entirely.

Q. In one section or in various sections?

A. Various sections. I ought not to say entirely to your question as to Manhattan. I have appraised outside Manhattan.

Q. Have you ever testified or been called upon to testify in judicial proceedings in reference to values of land on the Island of Manhattan?

A. Yes.

Q. Have you ever acted as Commissioner appointed by a Court for that purpose?

A. Yes.

Q. Will you instance any one or more cases?

A. The most recent proceeding is that of the Hudson Companies, to acquire title to lot in Fulton and Dey Streets, for their tunnel to Jersey; then, two others, the latest ones, were in the case of Knapp *v.* Knapp, a partition proceeding involving property in the northern part of Manhattan, and one in the matter of the application of John M. Bowers for leave to resign as Trustee under a certain will—property in the center of the city. I have acted as Commissioner in opening streets in various parts of the city.

Q. Will you name some instances for which you have acted in the sale of property in the City of New York within the last few years?

A. The Pennsylvania Railroad, I bought one-third of their property, aggregating about $6,000,000; for the Interborough Rapid Transit, Manhattan Elevated, Columbia College, City of New York; for the Astor Estates, Lorillard Estates, the Delano and Rhinelander Estates, the 42nd Street tunnel to Long Island City; then a
1070 large number of individuals, few of whom I remember, Seligman & Company, Austin G. Fox, George C. Clark; also for the Century Realty Company, the United States Realty Company, and various operators.

Q. Was any of this property which you have bought or sold in the vicinity of the plants of the Consolidated Gas Company on Manhattan Island?

A. In certain cases.

Q. Are you the Mr. Wheelock who acted as the appraiser for The Mutual Life and for the Equitable Life when the property was appraised for the Armstrong Investigating Committee?

A. I appraised about one-third of all their property through the United States.

Q. Referring to Complainant's Exhibit No. 48, have you made an examination of the real estate of the Consolidated Gas Company on Manhattan Island, as shown in that exhibit, with a view to testifying as to its value in these proceedings?

A. I have.

Q. Does that include the manufacturing plants, or simply the land with the office buildings, and such as that?

A. Land only.

Q. How long have you been engaged in examining these parcels?

A. Roughly, six weeks.

Q. Are you able to state the value of the various parcels?

A. The total?

Q. No, one by one and then the total.

A. Yes.

Q. Referring to Complainant's Exhibit 48, page 1, will you state what the value is, according to your opinion, of the property at the southwest corner of 116th Street and Lexington Avenue?

A. $93,000.

Q. What are the dimensions of that block?

A. They are 80 feet on 116th Street and 100 feet 11 inches on Lexington Avenue.

1071 Q. The plot being rectangular?

A. Yes; the block number is 1,643, lots 56, 57 and 58.

Q. Referring to the plot at the Northwest corner of Third Avenue and 114th Street, will you give the dimensions of the plot as it appears on Exhibit 48, and the value thereof?

A. The property faces on Third Avenue, and the dimensions on Third Avenue is 25 feet 2¾ inches; it then runs westerly 100 feet, thence northerly 50 feet 5 inches to the center line of the block; thence 100 feet 11 inches to the northerly side of East 114th Street, and thence easterly 150 feet 5 inches to the corner of Third Avenue and 113th Street, the point or place of beginning. The block number is 1,642, lots 32 and 33.

Q. Have you stated the value of the second plot?

A. The value of the land alone I place at $71,500; together with the building, at $96,500.

Q. In order to cover your future testimony, am I right in supposing that where you refer to the buildings, none of the buildings are part of the manufacturing or distributing plant of the Consolidated Gas Company?

A. That is right.

Q. Will you now refer to the plot on the Southeast corner of Irving Place and 15th Street?

A. Block No. 870, lot- 54, 59 and 60, the plot being 84 feet on Irving Place and 155 feet 6 inches on East 15th Street.

Q. Will you state the valuation of that?

A. Land alone, $257,000; with the buildings, $300,000.

Q. Referring now, on the same page of Exhibit 48, to the block at the Northeast corner of Hester Street and Elizabeth Street; will you give the dimensions?

A. Block 239, lots 1 to 5; I am not sure whether that is not 1 and 5, but I think it is lots 1 to 5; it faces 100 feet on Hester Street and 150 feet on Elizabeth Street; the value of the land I place at $170,000; together with the buildings, $192,000.

1072 Q. Please refer now to page 2 of the same Exhibit 48 and take the plot west of Avenue B and south of the line of 15th Street, giving the dimensions of that.

A. That is block No. 972, lot 45; it is very irregular. The frontage on 15th Street is 13 feet 3 inches, the beginning point is 300 feet west of the southwest corner of 15th Street and Avenue B; from that point it runs south 106 feet 8½ inches, then west 74 feet and 5 inches, thence north 3 feet 5½ inches, then west 75 feet 7 inches, then north 10 feet 7 inches, and then in a general northeasterly direction 155 feet 4 inches to the southerly side of east 15th Street, and east 13 feet 3 inches to the point or place of beginning. I value it at $30,000; there are no buildings there.

Q. Take next the plot between 17th and 18th Streets, Avenues B and C, as shown on the same page of the same exhibit.

A. Block No. 985, lots 17, 19 [illegible] 20, 39 and 40, beginning 138 feet easterly from the southeasterly corner of Avenue B and 18th Street, running easterly 300 feet, thence southerly 184 feet to the northerly side of 17th Street, thence westerly 350 feet, thence northerly 184 feet to the point or place of beginning. I value it at $261,500. That is land alone.

Q. Refer next to the plot between 14th and 15th Streets and between Avenues B and C on the same page?

A. Block No. 982, lot 13, facing 206 feet 6 inches on Avenue C, and on each street, 14th and 15th Streets, 434 feet 10 inches. I value that land alone at $439,500.

Q. Will you next refer to the same page, the plot facing on Avenue C between 15th and 16th Streets?

A. Block No. 989, lot 1, being the block front on the east side of Avenue C between 15th and 16th Streets, facing 206 feet 6 inches on Avenue C and 235 feet on each street.

1073 Q. What is your valuation of that?

A. $183,500 land alone.

Q. Please refer next to the plot between 15th and 16th Streets facing Avenue D, on the westerly side of Avenue D.

A. Block No. 989, lot 26, being the block between 15th and 16th Streets, on the westerly side of Avenue D, fronting 206 feet 6 inches on the avenue and 191 feet on each street. I value that at $124,000, land alone.

Q. Will you take next the plot between 15th and 16th Streets, between Avenue D and Tompkins Street, on the same page.

A. Block No. 991, lots 26 and 50 I believe; it is the entire block. These figures are from our city map and I believe them to be absolutely correct.

Q. At any rate, it is the entire block?

A. It is the entire block, bounded by Avenue D, Tompkins Street, East 15th and East 16th.

Q. What are the dimensions of the parcel?

A. On Avenue D 206 feet 6 inches; on East 16th Street 159 feet 2 inches. On Tompkins Street it is 212 feet. There is a question of a fraction of an inch there, but I believe 212 feet is correct. On 15th Street 251 feet 8 inches. I value the land alone at $157,500.

Q. Will you take next the parcel bounded by Avenue D, Tompkins Street, East 14th Street and East 15th Street?

A. Block No. 991, Lots 1 to 47, being the entire block bounded by Avenue D, Tompkins Street, East 14th and East 15th Streets, being 206 feet and 6 inches on Avenue D, 278 feet 7 inches on 15th Street, 212 feet on Tompkins Street and 371 feet 1 inch on 14th Street. My value is $257,000, land alone.

Q. *When* you next refer to the plot shown on the same page of Exhibit 48, bounded by East 14th and East 15th Streets, and by Avenues C and D?

1074 A. Block No. 988, Lot 1, being the entire block between Avenues C and D, and East 14th and 15th Streets; the dimensions on each avenue are 206 feet and 6 inches, and on each street 676 feet; and my value is $580,500 for the land alone.

Q. Are you also able to state the value of the bulkheads and land to the line across Tompkins Street from the plots which you have just described?

A. I am.

Mr. BURR: One moment. I do not think this witness is qualified as yet as an expert on the value of bulkhead property.

Mr. MATHEWSON: I think he is.
The MASTER: You may cross-examine him, Mr. Burr, if you wish.

By Mr. BURR:

Q. What experience have you had in bulkhead property in the City of New York?
A. Comparatively little.
Q. Have you had any at all?
A. Yes.
Q. What experience have you had?
A. I have sold one large water frontage, and I know in a very general way the condemnation proceedings entered into by the city for the acquisition——
Q. With regard to that particular piece?
A. No; others throughout the water front, pretty generally throughout the water front, particularly in the Chelsea improvements and also in the case of the docks at 41st and 42nd Streets, North River; the same on the East River.
Q. That knowledge you have in a general way, you say?
A. As to the prices paid, etc., you mean?
Q. Yes.
A. I know the prices that were paid and I have kept track of the testimony in those cases.

Mr. BURR: I submit this witness is not competent to testify
1075 as an expert with regard to bulkhead property.

The MASTER: I will allow him to answer and testify as an expert. Of course, his testimony probably on that subject might not be entitled to so much weight as that of a man who made a specialty of bulkhead property, but I think any well informed real estate man in the City of New York is entitled to express an opinion on it, and that it has some weight.
Mr. BURR: Exception.

By Mr. MATHEWSON:

Q. Does not the property to which I have directed your attention east of Tompkins Street comprise the land from the edge of Tompkins Street to the bulkhead line as well as bulkheads?
A. It does.
Q. And have you had experience in the sale and have you kept posted as to the prices received for water front land in the course of your experience as well as other land?
A. So far as considerations are shown. There are very few sales.
Q. Now, will you state the value which you place upon the bulkheads, including the land to the bulkhead line?

Mr. BURR: This is taken subject to my objection and exception.
The MASTER: Yes.

A. I have taken the two bulkheads together, that is, the bulkhead from the north side of 14th Street to the south side of 15th Street, and the bulkhead from the north side of 15th Street to the south side of 16th Street, together with the land under water from the

line of the present bulkheads, to the line of the present bulkhead line as established, and I figure that value to be $359,500.

1076 Q. Have you the dimensions at hand of the land between Tompkins Street and the bulkhead line of the bulkheads?

A. The dimensions of the bulkhead taken together and excluding 15th Street equal 450 lineal feet. The bulkhead line does not run parallel to the present bulkheads as constructed. The average distance from the entire 450 feet is 70 feet, and the number of square feet is found by multiplying 450 feet by 70, which gives 31,500 square feet.

Q. Does that include the land from Tompkins Street to the bulkhead line as well as bulkheads?

A. That includes from the present bulkheads to the present bulkhead line, as established.

Q. Well, does that extend to Tompkins Street?

A. It does.

Q. Will you now direct your attention to Complainant's Exhibit 49, showing property between Tenth Avenue and the North River, as well as two parcels each of Tenth Avenue, facing on 18th Street, showing the condition before the establishment of the marginal street by the city.

A. Yes.

Q. Have you also inspected and made a valuation of the property shown on this exhibit, Complainant's Exhibit 49?

A. So far as it can be seen at present.

Q. Will you take up one parcel at a time in the order in which it is convenient to you and state the value according to your judgment?

A. The first parcel is the entire block bounded by Tenth and Eleventh Avenues, and West 16th and West 17th Streets. I believe the number of the block is 688, lot 21, the size of the block being 184 feet by 800 feet, and the value $844,000.

Q. Now, please take the next parcel?

A. The next parcel is the entire block between Tenth and Eleventh Avenues, 17th and 18th Streets, block 689, lot 17, size 184 feet by 800 feet. My value is $808,500.

1077 Q. Now, take the third parcel?

A. The third parcel is a portion of the block bounded by Tenth Avenue, West 18th and West 19th Streets, the dimension on 18th Street being 525 feet, on Tenth Avenue 184 feet, and separate lots on 19th Street, the sizes being as follows: 125 by 92 feet, 25 by 92 feet, 100 by 92 feet and 150 by 92 feet. In other words, there are five lots owned by other parties in this block.

Q. Five lots of what dimension?

A. Twenty-five each by ninety-two.

By Mr. PAGE:

Q. Do you know the lot and block numbers there?

A. Block 690, lots 12, 40, 42, 43, 44, 45, 48, 49, 50, 51, 52 and 53. It may possibly be that 54 is also included, but I doubt it.

By Mr. MATHEWSON:

Q. In other words, the frontage on 19th Street of the lots that the company owns is 400 feet, is it not?

A. Four hundred feet, yes, sir.

Q. And the westerly dimension of this plot is also 184 feet, the same as the Avenue frontage?

A. Yes.

Q. Now, you may state the value?

A. $453,500.

Q. Will you now take the next plot in order?

A. That is a portion of the block bounded by Eleventh Avenue, Nineteenth and Twentieth Streets, being 184 feet on Eleventh Avenue and 350 feet on each street, in the easterly line being 184 feet. I place a value of $340,000. That block is numbered 691. I cannot give the lot numbers:

Mr. BURR: May we be furnished with a copy of that Exhibit No. 49, Mr. Mathewson?

Mr. MATHEWSON: Yes, I thought you had a *a* copy.

1078 The WITNESS (continuing): The next block is the entire block bounded by Eleventh and Thirteenth Avenues, West 16th and West 17th Streets, being 188 feet 9 inches on Thirteenth Avenue, 184 feet on Eleventh Avenue, 24 feet 10 inches on West 16th Street, 66 feet and 11 inches on West 17th Street. The value is $63,000. The block number is 666, lot No. 3. The next block is the entire parcel between Thirteenth Avenue and Eleventh Avenue, 17th and 18th Streets, being 188 feet 9 inches on Thirteenth Avenue, 184 feet on Eleventh Avenue, 122 feet and 2½ inches on 18th Street and 80 feet 2½ inches on 17th Street, being Block 666, lot No. 12. My value on that is $127,500.

Q. Take the next one in order from the same page of the exhibit.

A. The bulkhead between 16th and 17th Streets, being 212 feet, I value at——

Mr. BURR: This testimony is also subject to my objection and exception.

The MASTER: Certainly.

The WITNESS (continuing): $148,500; and the bulkhead from the north side of 17th Street to the south side of 18th Street, being 212 feet in length, I value at the same figure: $148,500.

Q. That includes the land from the street to the bulkhead line, does it?

A. Yes.

Q. That covers all the bulkheads, does it, Mr. Wheelock.

A. Yes.

Q. Do your values for these parcels include the land without any buildings?

A. Thus far.

Q. Except where you have stated?

A. Yes.

Q. There also appears on Exhibit 49, and likewise on Exhibit 48, a small parcel on the north side of West 18th Street, about 275 feet

East of Tenth Avenue. Please give the dimensions and block number and valuation?

A. The block number is 716, lot No. 14, the plot being
1079 75 feet by 92, and the value of the land alone being $41,500, and, with the buildings, $45,500.

Q. There also appears on Complainant's Exhibit 49 and on Complainant's Exhibit 48, a parcel on the South side of West 18th Street, beginning 160 feet East of Tenth Avenue. Will you give the dimensions of that parcel and its value?

A. Block No. 715, Lot No. 51 to 59. The dimensions of the plot 225 feet by 92 feet, and my value is $127,500 for the land alone.

Q. Please refer to page 4 of Complainant's Exhibit 48, and give the dimensions and your valuation of the plot on the South side of East 20th Street, beginning 94 feet west of Avenue A?

A. That is Block 951, Lot 35; the plot is 176 feet in front by 92 feet deep. My valuation of the land alone is $66,000 and with buildings, $76,000.

Q. Please take now the large plot between East 20th and 21st Streets, fronting on the westerly side of Avenue A, and state the dimensions and value?

A. That is Block 952, lot Nos. 7, 29, 30, 33, 34 and 35, being 184 feet on Avenue A and 517 feet on each street, and the westerly line being 184 feet. I value the land alone at $430,500, and, with buildings, $439,500.

Q. Consider next, if you please, the block bounded by East 21st and 22d Streets and by First Avenue and Avenue A, giving like data?

A. That is Block 953, lot 1, being the entire block between First Avenue and Avenue A and 21st and 22d Streets, being in size 197 feet 6 inches by 613 feet. My value is $640,000 for the land alone.

Q. Will you take next the plot bounded by East 21st and 22d Streets and by Avenue A and the marginal street, and give the same data?

A. That is Block 979, lot No. 1, being the entire block bounded by Avenue A, the marginal street, 21st and 22d Streets, and
1080 being 197 feet 6 inches on Avenue A, 594 feet and 7 inches on 22d Street, being 212 feet more or less on the marginal street and 760 feet and 3 inches on 21st Street, and for the land alone my value is $578,000.

Q. Please take next the block bounded by 20th and 21st Streets, Avenue A and Avenue B, and state the dimensions and values.

A. Block No. 978, lots 1, 2, 3, 5, and 6, being the entire block bounded by Avenue- A and B, 20th and 21st Street-, excepting a lot 23 feet by 70 approximately, in the center of the block facing on the east side of Avenue A. The dimensions are, on Avenue B, 184 feet, 666 feet on 20th and 21st Streets, and a total frontage on Avenue A of 161 feet. My value of the land alone is $516,500, and, with buildings, $537,500.

Q. The frontage on Avenue B is 184 feet?

A. Yes, sir.

Q. Will you take the next parcel shown on page 4 of Exhibit 48, which you have before you, and describe it?

A. That is the parcel bounded by Avenue B, and the marginal street, 20th and 21st Streets, the size being as follows: On 21st Street, 84.54 feet; on the marginal street 212 feet more or less; on 20th Street, 238.78 feet, and on Avenue B 184 feet. The value is $130,500. The block number is 987, lots 37, 41, 42, 43 and 51.

Q. Will you kindly refer now to page 5 of Complainant's Exhibit 48 and give the dimensions and valuation of the plot on the northerly side of 42nd Street beginning 100 feet west of 11th Avenue?

A. That is Block 1090, lot 23; the plot is 150 feet front by 100 feet 5 inches in depth, and my value of land alone is $77,000.

Q. Please refer next to the parcel on the north side of 42nd Street, being 225 feet east of 11th Avenue?

A. That is Block 1071, lots 10, 11, 12 and 13; the plot is 100 by 100 feet 5 inches, and my value of the land alone is $60,000.

1081 Q. Will you now refer to the plot on the north side of 41st Street, beginning 100 feet east of 11th Avenue?

A. That is Block 1070, lot No. 5; the plot is 200 feet by 98 feet 9 inches.

Q. A rectangular plot?

A. Yes. My value for the land alone is $85,800.

Q. Will you now take the large plot shown on the westerly side of 11th Avenue between 41st and 42d Streets, running from 11th Avenue to the end of the pier?

A. The upland is Block 1089, lot 1; the bulkhead and pier, Block 1107, lot 7. The dimensions, unless you want me to give them, it will take some little time because they are quite irregular.

Q. Are the dimensions as shown in Exhibit 48 for this plot?

A. Yes. It includes the whole block running from 11th Avenue on the east to the end of the pier on the west, from the north side of 41st Street to the south side of 42nd Street, and my value——

Q. One minute. Have you the dimensions there, the exact dimensions?

A. I have the dimensions of the land.

Mr. BURR: I think we had better have the dimensions.

The WITNESS (continuing): The dimension on 11th Avenue is 197 feet and 6 inches. The distance on each street is 1,051 feet and 4 inches of the upland, and 400 feet approximately of the land under water to the exterior line of 13th Avenue, and the dimension on 13th Avenue is 197 feet 5 inches, that is the westerly dimension.

Q. Is the frontage on the 41st Street line quite 1,051 feet 4 inches?

A. I make it so. I beg your pardon; I am in error. It is 1,050 feet and no inches.

Q. On 41st Street?

A. Yes, sir.

Q. Now, will you state your valuation for this parcel?

A. $1,166,000.

1082 Mr. PAGE: That is not separated, it is all together?

The WITNESS: It is all together.

Q. Please refer now to page 6 of Exhibit 48, and state the dimensions of the first parcel and your valuation?

A. The first parcel is the upland in the block bounded by 11th and 13th Avenues, 44th to 45th Streets, and together with the bulkhead the parcel is irregular. It begins at a point on the southerly side of 45th Street, distant 125 feet westerly from the southwesterly corner of 11th Avenue and 45th Street and runs thence southerly 100 feet 5 inches to the center line of the block; thence easterly 25 feet; thence southerly 100 feet 5 inches to the northerly side of 44th Street; thence 950 feet to the bulkhead line; thence further west a distance of 480 feet to the exterior line of 13th Avenue; thence northerly 200 feet to the prolongation of the southerly line of West 45th Street; thence easterly along the southerly line of 45th Street approximately 480 feet to the bulkheads; thence easterly again 925 feet to the point or place of beginning.

Q. Will you state your valuation for this parcel which you have described?

A. For the land and bulkheads, $910,000, and with the buildings $920,000.

Mr. PAGE: Give us the block numbers.

The WITNESS: The upland is block No. 1092, lots 1, 28, 38, 38½ and 39; the bulkhead is block No. 1107, lot 23.

Q. Now will you take the property of the company between 45th Street and 46th Streets, and west of Eleventh Avenue, and similarly describe it and give your valuation?

A. The property begins at a point on the southerly side
1083 of West 46th Street 300 feet west from the southwesterly corner of Eleventh Avenue and 46th Street, runs thence southerly 100 feet 6 inches to the center line of the block; thence easterly 75 feet; thence southerly100 feet 5 inches to the northerly side of West 45th Street; thence westerly to the bulkhead line 825 feet; thence westerly to the exterior line of Thirteenth Avenue, approximately 480 feet; thence northerly along the exterior line of Thirteenth Avenue 197 feet 5 inches to the prolongation of the southerly line of 46th Street; thence easterly to the bulkhead; thence from the bulkhead along 46th Street to the point or place of beginning, 750 feet.

Q. What is your valuation for the parcel?

A. $800,000. The upland is Block No. 1093, lot 1, and the bulkhead is Block No. 1107, lot 28.

Q. Refer if you please to page 7 of Exhibit 48 and describe and give the value of the parcel between 62nd and 63rd Streets, First Avenue and Avenue A?

A. That is Block 1457 and lot No. 6, being 261 feet 5¾ inches on 63rd street, 266 feet 5¾ inches on 62nd street; the easterly line is 200 feet 10 inches and the westerly line is 200 feet 10 inches, not being a rectangle. The value of the lot alone is $175,000.

Q. Will you now take the parcel between 60th and 61st Streets fronting on the west side of Avenue A?

A. That is Block No. 1455, lot No. 13, being 200 feet 10 inches on the westerly side of Avenue A and 313 feet on both 60th and 61st Streets, and the westerly line *between* 200 feet 10 inches. My valuation of that land is $235,000.

Q. No buildings?

A. No building.

Mr. PAGE: Do you mean it is vacant?

The WITNESS: I am not valuing any buildings on that land. There are two old structures, though, of some kind or other, frame shanties.

1084 Mr. PAGE: I mean it is practically vacant.

The WITNESS: Yes.

Q. Take next the parcel at the northeast corner of Avenue A and 60th Street.

A. That is Block No. 1474, lot 24, being on the westerly side of Avenue A and fronting on that avenue 114 feet 5 inches, and on East 60th Street 64 feet, and approximately 30 feet at its northern end. The value of that lot is $27,000, land alone.

Q. Will you now look at page 8 of Exhibit 48 and give *you* the dimensions and value of the parcel between the Hudson River Railroad, West End Avenue and 65th and 66th Streets.

A. The block is No. 1177, lot No. 21. The dimensions are 343 feet 9 inches on 66th Street, 200 feet 10 inches on West End avenue, 299 feet 9 inches on 65th Street and approximately 213 feet on the railroad tracks. My value is $191,500.

Q. Take next the block bounded by West End and Amsterdam avenues, 65th and 66th Streets.

A. That is the entire block between those avenues and those streets. The size is 200 feet 10 inches by 800. I should say the block No. is 1157 and the lot number 1. My value of the entire block is $703,000.

Q. Please take the next parcel on the south side of 56th street, a small parcel about 100 feet square.

A. That is in Block 1156, lots 45 and 46. The dimensions are 100 by 100 feet 5 inches. Land alone I value at $34,500, and with the buildings $41,500.

Q. Please turn now to page 9 of Exhibit 48 and give the dimensions and valuation of the property of the company bounded by First and Second Avenues, 98th and 99 Streets, land only?

A. That is Block 1670, lot No. 1. The size of the plot is 201 feet 10 inches on the avenues by 650 feet on the streets, and my value is $667,500.

Q. Will you take next the plot bounded by First Avenue
1085 and the marginal street, and 98th and 99th Streets?

A. Block 1692, lot No. 1. The parcel is 201 feet 10 inches on First Avenue, 370.57 feet on 99th Street, 212 feet roughly on the marginal street, being a diagonal line, and 270.24 feet on 98th Street. My value for the land alone is $255,000.

Q. Please turn to page 10 of Exhibit 48 and give the dimensions and value of the property of the company between 111th and 112th Streets?

A. That is block 1683, lots 18, 34 and 35. The parcel begins at the northwest corner of First Avenue and East 111th Street, and runs thence westerly 225 feet; thence northerly 201 feet 10 inches to the southerly side of East 112th Street; thence easterly 50 feet; thence southerly 100 feet 11 inches to the center line of the block; thence easterly 75 feet; thence southerly 25 feet, more or less; thence easterly

100 feet to First Avenue and thence southerly 75 feet 11 inches to the point or place of beginning. My valuation is $121,000.

Q. Land only?

A. Land only.

Q. We will take next the plot between 110th and 111th Street-, fronting on the easterly side of First Avenue?

A. Block No. 1682, lots 8 and 11, being 201 feet 10 inches on First Avenue and 475 feet on each street with a westerly line of 201 feet 10 inches. My value is $450,000 for the land only.

Q. Will you now take the block between First and Pleasant Avenues, 110th and 111th Streets?

A. Block 1704, lot No. 1, being the entire block between First and Pleasant Avenues and 110th and 111th Streets, fronting 201 feet 10 inches on the avenues, and 613 feet on the streets. My value for the land only is $491,500.

Mr. BURR: On the diagram I notice the dimensions are given on Pleasant Avenue as 155.28 feet. Is that right?

Mr. MATHEWSON: No.

1086 The WITNESS: I cannot find that has anything to do with the real estate in possession, Mr. Burr.

Mr. MATHEWSON: That goes to another line. It is cut in, you will notice, about a quarter of an inch below the bottom.

Q. Will you next take the parcel between Pleasant Avenue and the bulkhead line and between the lines of 110th and 111th Streets?

A. That bulkhead is 212 feet long, and the bulkhead, together with the land under water out to the bulkhead line I value at $71,000.

Mr. PAGE: Is there any block number for that parcel?

The WITNESS: Yes, block 1712, lot No. 2. I believe that is correct, but I am not quite sure.

Q. Will you now look at the parcel on page 11 of Exhibit 48, between 132nd and 133rd Streets, 12th Avenue and the Boulevard?

A. That is block No. 1999, lot No. 1. Beginning at a point on the southerly side of West 133rd Street, running 125 feet westerly from the southwesterly corner of Broadway and 133rd Street and running thence westerly 650 feet to 12th Avenue; thence southerly and along the easterly side of 12th Avenue 199 feet 10 inches to the northerly side of West 132nd Street; thence easterly along the northerly side of 132nd Street 675 feet to a point 100 feet westerly from the northwesterly corner of Broadway and 132nd Street; thence northerly 99 feet 8 inches to the center line of the block; thence westerly 25 feet; thence northerly 99 feet 8 inches to the point or place of beginning, being the southerly side of West 133rd Street.

Q. The Boulevard is now known as Broadway?

A. Yes.

Q. What is your valuation for that parcel?

A. $455,500.

1087 Q. Will you now look at the parcel on page 12, Inwood Station, fronting in part on Sherman Avenue and part on

Kingsbridge Road. Are the dimensions which appear in this exhibit real dimensions?

A. They correspond with the tax maps.

Q. And you believe them to be the real dimensions?

A. I do.

Q. Will you state the value of that land?

A. $89,000.

Mr. PAGE: What are the block and lot numbers?

The WITNESS: Block No. 2175, and lot- 15, 18, 22 and 100.

Q. Does that include all the land in Manhattan which you have valued?

A. Yes.

Q. And will you state the total of the valuation?

A. The total of the valuation in Manhattan is $15,664.500.

Mr. PAGE: Is that of land alone?

The WITNESS: Land and buildings, such buildings as were valued.

Q. I understand that in this valuation you included no buildings which were any part of the manufacturing or distributing plant of the Consolidated Gas Company?

A. That is so.

Q. Have you placed a valuation upon the Shady Side property of the Consolidated Gas Company, which is shown on page 5 of Exhibit 48?

A. I have.

Q. What is its value?

A. $300,000.

Mr. PAGE: I wish to note an objection, that there is no evidence that the Shady Side property is used in any way for the gas making business of the Consolidated Gas Company.

The MASTER: I overrule that objection for the present.

1088 Mr. PAGE: Exception.

Mr. BURR: I make the same objection and exception.

Q. And the grand total, including the Shady Side and the Manhattan property as valued, is how much?

A. $15,964,500.

Q. Have you personally inspected and examined all these parcels?

A. I have.

Q. Made a study of the records of your office in addition to your experience as to sales and purchases in Manhattan?

A. I have.

Q. With particular reference to the value of these particular parcels?

A. Yes.

Q. And are the values which you have stated to the best of your judgment the real values of the properties?

A. Yes.

Mr. MATHEWSON: That is all,

Cross-examination by Mr. PAGE:

Q. If you will turn back to page 1 of your map; referring to Block 1643, lots 56, 57 and 58, which you valued at $93,000; tell me how you arrived at that result?

A. I take a unit of value, the unit being 25 feet by 100.

Q. That is known as a city lot?

A. Known as a city lot, yes, at $21,000. I allow in excess of that amount 60 per cent., for the corner 25 feet, making a total for the corner lot of $33,600. That leaves a frontage on Lexington Avenue of 75 11/12 feet, valued at the rate of $21,000 for every 25 feet or $840 per front foot, which multiplied by the number of front feet makes $63,697, or a total for a plot 100 feet 11 inches by 100 feet deep of 97,297 feet. The plot being 80 feet deep, it is equal in my opinion to 91 per cent. of the whole, or $88,540. On acount
1089 of the size I add 5 per cent. or $4,427, making a total of $92,967, which I have called $93,000.

Q. You add 5 per cent. for plottage, is that what it is called usually?

A. For plottage, yes.

Q. Now, upon what do you base your value of $21,000 a lot?

A. An inspection of the neighborhood and comparison in my own mind with other neighborhoods.

Q. Have you bought or sold property on 116th Street and Lexington Avenue?

A. I have not. I have sold nothing there.

Q. Have you made investigations as to sales that have been made?

A. I find very few, almost no sales.

Q. Is that entirely vacant land?

A. Yes.

Q. The next plot is Block 1642, lots 32 and 33.

A. Being the corner of Third Avenue and 114th Street. I take a unit of value on Third Avenue of $25,000 and on 114th Street at that point of $14,000. I allow as before 60 per cent. in addition to the unit of value for the corner, making the corner $40,000 and the interior 50 feet on the street 50 x 100 feet at $14,000 a lot makes $28,000 for the street lots, which added to the corner makes $68,000. For plottage I add 5 per cent., making a total of $71,400 and I called it $71,500. For the buildings I add $25,000, making a total of $96,500.

Q. You mean you would add a plottage of 5 per cent. for two lots?

A. No.

Q. Well two lots with an L-shaped parcel running up to the corner?

A. Three lots.

Q. Well, I say two lots with an L running to the corner?

A. Yes, sir.

Q. Have you bought or sold property in that immediate neighborhood?

A. Not close to that, no.

Q. I notice that you valued the buildings on this last plot, Block 1642?

A. Yes.

Q. What are they used for?

A. Offices. The Third Avenue building is used for Offices.

1090 The 114th Street building is used for storage and repairs to meters, gas ranges and such things.

Mr. MATHEWSON: Offices of the Consolidated Gas Company?

The WITNESS: In that section, yes.

Q. How large are the buildings, how many stories?

A. The buildings cover the Third Avenue lot and the entire 114th Street plot with the exception of 10 feet in the rear and that 10 feet I believe to be covered with a one-story extension which is sky-lighted. The buildings are two, three and four stories high and are of brick.

Q. And what value did you place upon the buildings aside from the land?

A. $25,000.

Q. We will take block 870?

A. That is the southeasterly corner of Irving Place and 15th street?

Q. Yes.

A. I place the unit of value on Irving Place at $45,000, and on 15th Street $27,000, and add sixty per cent. for the corner in addition to the unit of value, making $72,000 for the corner. There are left 59 interior feet on Irving Place, each 100 feet deep, which at $1,800 per front foot, equalling $45,000 a lot, figures to $106,200. On 15th Street there are 55½ feet, which at the rate of $27,000 per lot or $1,080 per front foot, figures $55,444. The total is $233,644. For plottage I have added ten per cent., making a total of $257,000, which was my value of the land alone, and to that I add $43,000 for the buildings, or a total of $300,000.

Q. How did you arrive at the value of the buildings?

A. I put a figure that I thought the buildings would bring in a sale.

Q. How much is the building?

A. There are three buildings.

1091 Q. Well?

A. The corner is 41 feet 3 inches on Irving Place and 61 feet on 15th Street.

Q. How many stories is that?

A. That is five, and two and one stories in the rear. The greater part is five stories. The next building to the south on Irving Place is 25 feet front and 92 feet deep. I am in error. The height of the corner building is three stories. The height of the next building to the south on Irving Place is five stories, and the size of the third building which faces on 15th Street is 23 by 50, and its height is four stories.

Q. Is it a brick building?

A. Yes, brick and brownstone.

Q. Brownstone front?

A. Brownstone front.

Q. All three of the buildings, or just that one?

A. The corner building is brownstone front on both 15th Street and Irving Place, and the others are brick.

Q. Have you either bought or sold property in this immediate neighborhood?

A. I have sold property comparatively near this.

Q. How near?

A. I sold the southwest corner of 20th Street and Irving Place to Columbia College for the estate of Mr. Luther Clark. I have also sold 2 East 16th Street. I also sold the southwest corner of East 17th Street and Fifth Avenue. I think that is all in this immediate neighborhood.

Q. The price at the southwest corner of Fifth Avenue and 16th Street, or whatever the street was, would not give you much of a guide on Irving Place, would it?

A. Not very much, no.

Q. The relative differences between the values on Fifth Avenue and Irving Place are very great, are they not?

A. Yes.

Q. How recent was that sale that you spoke of that you made at the corner of Irving Place and 20th Street?

A. That was a year ago.

1092 Q. What corner of 20th Street was that?

A. Southwesterly corner.

Q. Was that the Bergen house?

A. No, it was the old Clark house, and we sold it to Columbia College and they used it for a club; a four-story house with a stable in the rear.

Q. Did you give the date of that sale?

A. No, I can furnish it, but it was in August, last year.

Q. That is near enough. What price did you get for that building?

A. $150,000, 40 feet by 134 feet; 40 feet on Gramercy Park.

Q. This plot that you sold faces Gramercy Park?

A. Yes, sir.

Q. And is a large, handsome residence, is it not?

A. Old-fashioned.

Q. Nevertheless, large and handsome?

A. Yes, it was.

Q. And, relatively, property so situated would be of much larger value than this at 15th Street and Irving Place?

A. No, considerable less.

Q. It would be of less value?

A. Considerably.

Q. Now, we will take Block 239?

A. That is at the corner of Hester and Elizabeth Streets. I place a unit of value on Hester Street of $25,000, and on Elizabeth, $22,000. I allow 60 per cent. in addition to the unit value for the corner, making the corner 100 by 100, $110,400; for the two lots on Elizabeth Street, $44,000, or a total of $154,400. Add ten per cent. for size, or $169,840. I have called it $170,000. I add $22,000 for the building, making the total land and building, $192,000.

Q. What is that property used for?

A. The offices of the Gas Company; and on the Hester Street

front and the rear of Elizabeth Street, gas ranges, meters, wagons, etc.

Q. It is all used for the purposes of the company?

A. As far as I can see.

Q. Have you sold property or dealt in property in this
1093 immediate neighborhood?

A. Fairly close. Numbers 243 and 245 Canal Street, between Elm and Center, was sold by our office in March, 1906.

Q. Well, now if you will turn to No. 972. That is on page 2, an irregular piece?

A. Yes. I place a unit of value at that point at $12,000. I divide the plot and take 13 feet 3 inches frontage by 100 feet in depth at the rate of $12,000 a lot. That figures to $6,360. I add for depth an arbitrary sum of $200, the plot being 6 feet in excess of 100.

Q. How do you arrive at that?

A. Simply what I thought it was worth.

Q. You did not apply any rule as to the value of interior property?

A. No, I did not.

Q. Proceed.

A. $6,560 for that strip. Then I find the value of the front plot facing on 15th Street, being 137 feet front by 92.6 feet depth, with a southerly line of 165 feet 4 inches; I find that lot to be $40,771. I then find the value of the entire plot, 137 feet by 103 feet 3 inches, and I figure that up $67,760. I then subtract the first value from the second and reach a figure of $26,989 for the triangular interior property, which, added to a lot 13 feet 3 inches by 106, makes the total value $33,549. I then subtract by reason of the shape, $3,500, which gives $30,049. I call it $30.000.

Q. In arriving at these values do you apply any rules as to valuation? I mean the differences to be allowed for interiors and exteriors?

A. Yes, I have used in general the Hoffman scale.

Q. But you did not use that in this instance?

A. No, the reason being that it was a small lot, only 13 feet wide, and the extra depth, 106 feet, made less difference to that lot than it would to a wider lot. If it had been wider I should have used the Hoffman scale. This is probably about one-half the amount of the Hoffman scale.

1094 Q. Are there any buildings at all on this property?

A. Sheds, I think, as well as I could see.

Q. Take No. 985.

A. I put a unit of value for a lot of 25 by 92, which is the standard lot in that block, at $8,500; there being 28 lots at that figure, the total is $238,000, and with 10 per cent. for plottage added, a total is reached of $261,800. I make it $261,500.

Q. For what purpose is that occupied?

A. There are holders on a portion of it, and I think there are buildings used in connection with the holders on the rest. The land is pretty well taken up with holders.

Q. The tract at East 17th and 18th Streets, between Avenues B and C; that is the particular tract that you have been testifying to?

A. This one, yes.

Q. Did you appraise the value of the land for the use to which it is now put, or what would be its value if the holders were removed, and merely the lots were there?

A. I estimated what it would sell for, what I believe it would sell for today.

Q. If the holders were removed?

A. I am only concerned in the land alone.

Q. Yes, but you mean what it would sell for as vacant land.

A. What it would sell for as vacant land today.

Q. Have you dealt in property between Avenues A and B and 17th and 18th Streets?

A. I have sold about fifty lots over there for John Jacob Astor, to tenants in the block bounded by 14th and 15th Streets, First Avenue and Avenue A; the north side of 15th street and on Avenue A; I have also sold 316 East 19th street, 51 Avenue B, and 127 to 131 Avenue A.

Q. Property in this immediate neighborhood?

A. Yes.

Q. Take the next tract, which is 982.

A. My unit of value for a lot on 15th Street is $10,500;
1095 unit of value for a lot on 14th Street, $12,000; unit of value for a lot on Avenue C, $10,500. Do you wish me to go through the process?

Q. Yes.

A. Taking 15th street, there are 334 interior feet at $10,500 per lot, or at the rate of $420 per front foot; total for 15th Street frontage, $140,280. Taking 18th Street frontage, 334 feet 10 inches, at the rate of $12,000 per lot, is $480 per front foot; total, $160,720; Avenue C, 206 feet 6 inches front; 15th Street corner, $10,500, with 50 per cent. added for the corner, making a total for that corner of $15,750. At 14th Street corner the same figuring, adding for the fact that it is at the corner of 14th Street and Avenue C, $17,000; interior 156 feet 6 inches at the rate of $10,500 per lot, or $420 per front foot, $65,730, or total for the Avenue C frontage, including 14th Street and 15th Street corners, $98,480. Total for the plot, $399,480, to which add 10 per cent., making a total of $439,428, which I have called $439,500.

Q. This property has holders on it also, has it?

A. Holders, yes, and some buildings used in connection with the holders.

Q. Now, have you sold property in the immediate neighborhood of this plant?

A. This is only one block away from the other, so that I thought the property that I sold near the other might apply to this neighborhood.

Q. These properties that you sold, were they opposite gas works?

A. Not in any case.

Q. Turn to No. 989.

A. Facing on Avenue C, from 15th to 16th. My unit of value for Avenue C is $9,000 and for 15th and 16th Streets, $7,750. The Avenue C front is divided as follows: Two corners at $9,000 plus 50 per cent. in addition to the lot value makes $27,000, leaving 156½ interior feet, which at $9,000 per lot or $360 per front foot makes a total for interior, Avenue C, $56,340, or a total for
1096 the Avenue of $83,340. Fifteenth and 16th Streets, there are in all 270 front feet, at the rate of $7,750 per lot, or $310 per front foot, equals $83,700, or a total for the property of $167,040; to which 10 per cent. is added, making $183,744, which I call $183,500.

Q. And this property is occupied by holders?

A. Holders.

Q. I understood you to say that you never have sold property in the immediate proximity of or opposite gas works?

A. Not opposite these gas works.

Q. Now, lot 26, on the same block?

A. That is the west side of Avenue D, from 15th to 16th Streets. I took one unit for the whole block, which is $7,000. On 15th and 16th Streets there are 182 interior front feet, at the rate of $7,000 per lot or $280 per front foot, total $50,960. On Avenue D there are 156½ feet of interior front, $7,000 per lot or $280 per front foot, total $43,820. The two corners at $7,000 apiece, plus 50 per cent., equal $21,000; for the total plot $115,780, to which I add 7 per cent. for size making $123,884, which I have called $124,000.

Q. There are no buildings on this property, are there?

A. There are no buildings there.

Q. Now, Block No. 991.

A. That is the entire block between Avenue D and Tompkins, 15th and 16th Streets. That is an irregular block and I divided it irregularly. The unit of value upon the marginal street I place at $8,000; the unit on Avenue D, 15th and 16th Streets I place at $7,000. The first lot is at the corner of Avenue D and 15th Street, 25 by 100, plus 50 per cent.; at a unit of $7,000, making $10,500 for that corner. There are 78 feet 3 inches of interior land, at $7,000 per lot or $280 a front foot, making $21,910, or a total for a plot in that location of 100 by 103 feet, of $32,410. The plot being 59 feet 2 inches deep, it is equal to 75 per cent. of the whole value, or $24,307.

1097 The next is the corner of the marginal street and 16th Street, which I take at 25 by 112 feet; an average corner 25 by 100, at a unit of $8,000, plus 50 per cent. would make the corner $12,000; adding 5 per cent. for the extra depth, according to the Hoffman rule, or $600, makes a total for the corner of 25 by 112 of $12,600. Adjoining this are 81 interior feet on the marginal street, which at $8,000 per lot, or $320 per front foot, would total $25,920; the average depth of this plot being 81 feet by 129, I add 15 per cent., or $3,880, making a total for a plot 81 by an average of 129, of $29,800, which, added to the $12,600, being the value of the corner of 16th Street, makes a total for the marginal street of $42,400.

The next corner is the marginal street and 15th Street, being 25 by 100, at the unit of $8,000, plus 50 per cent., makes a total of $12,000. The depth of that corner being 144 feet I add 22 per cent. to the $12,000, making the total for that corner $14,640.

There are left 81 interior feet, which at $8,000 a lot or $320 per front foot makes a total of $25,920. The average depth of the plot of 81 feet being 128½ feet, I add 13 per cent., or $3,369, making a total for the plot 81 by an average of 128 of $29,289, which added to the corner of 15th Street and the marginal street makes a total for that frontage of $43,929.

The remaining plot is at the corner of 15th Street and Avenue D, size 100 x 100; a corner 25 x 100 at $7,000 per lot, plus 50 per cent., makes for the corner $10,500; there are 78 feet 3 inches interior feet, which at $7,000 per lot, or $280 per front foot, is $21,910. The total for the plot of 100 x 100, is $32,410, which added to the above makes a total of $143,046, add 10 per cent. for the entire block, and the total is $157,350, which I have called $157,500.

1098 Q. This property is used for yards?

A. Storage and yards.

Q. It is vacant property?

A. There are no buildings on it.

Q. That is what I mean. The next is in the same block No. 991, lots 1 to 47?

A. I put a unit of value on the marginal street of $8,500, on 14th Street $8,000, on 15th Street $7,000, and on Avenue D $8,000. The first lot is one at the corner of 15th Street and Avenue D, facing 100 feet on 15th Street and 103 feet 3 inches on Avenue D, the corner 25 feet at the rate of $8,000 per lot, plus 50 per cent. is $12,000. There are left 78.3 interior feet, which at the rate of $8,000 a lot, or $320 per front foot, makes a total of $25,040, or a total for the plot 100 feet by 103 feet 3 inches of $37,040.

The next plot is 78 feet 7 inches by 103 feet 7 inches, on the south side of 15th Street, 78½ feet at $8,000 per lot, or $280 per front foot, making a total of $21,980.

The next lot is 100 feet on 15th Street and 106 feet on the marginal street, 146 feet 3 inches on the center line of the block and 103 feet 3 inches on the westerly line; the corner 25 feet by 100, plus 50 per cent., $12,750; the average depth being 110 feet, I have added 5 per cent., or $637, making a total for that corner lot of $13,387.

There remain 81 interior feet by 100 feet deep, at $8,000 per lot or $340 a front foot, equals $27,540; the average depth being 129 feet I have added 15 per cent., making a total for that plot of $31,671, which added to the corner of 15th Street and the marginal street makes a total for the half block on the marginal street of $45,058.

The next plot is the corner of 14th Street and the marginal street, being 106 feet on the marginal street and 100 feet on 14th Street.

1099 A corner 25 by 100 plus 50 per cent., at the rate of $8,500 per lot, is $12,750, and the 81 interior feet at $8,500 per lot, or $340 per front foot, is $27,540; making a total for that parcel of $40,290.

The next parcel faces 92 feet 6 inches on 15th Street, and 46 feet 3 inches on the center line of the plot, the average width being 69.33 feet, which at the rate of $320 per front foot, which is at the rate of $8,000 per lot, makes a total of $22,185. Then, on account of the extra width in front, I add $5,000, making a total of $27,185 for that parcel.

The next parcel is 78 feet 7 inches on 14th Street by 103 feet 3 inches; 78 feet 7 inches at a unit of $8,000, or $320 per front foot makes a total for the parcel of $25,120.

The next parcel and last is the corner of 14th Street and Avenue D, 100 by 103 feet 3 inches on the avenue corner; 25 by 100 plus fifty per cent., at a unit of $8,000, makes $12,000. The interior 78 feet 3 inches at $8,000, or $320 per front foot, makes a total of $25,040, making a total for the parcel of $37,040. These added together make a total for that block of $233,713, to which add 10 per cent, for size, $257,084, which I call $257,000.

Q. And that plot is used for what purpose?

A. Coal.

Q. Coal storage?

A. Yes.

Q. Now we will take Block No. 988, the entire block.

A. I place a unit on Avenue C of $10,000; on 15th Street $8,000; Avenue D, $8,000, and 14th street, $10,000.

The first is the Avenue C frontage, the 15th Street corner plus fifty per cent., at unit of $10,000, making $15,000 for the corner.

The 14th Street corner is the same, plus $1,000; the inside 156 feet 6 inches, at the rate of $10,000 per lot, or $400 per front foot, is $62,600; making a total for the Avenue C frontage of $93,600.

On 15th Street there are 476 interior feet, at $8,000 per lot,
1100 or $320 per front foot, makes a total for 15th Street of $152,320. On 14th Street, including the 14th Street half of the Avenue D frontage, there are 576 feet, of which 25 feet is the corner; the corner plus fifty per cent. equals $15,000, at the rate of $10,000 per lot.

There are left 551 interior feet, which at $10,000 per lot, or $400 per front foot, equals $220,400, or a total for the 14th Street and half of the Avenue D frontage, $235,400. The Avenue D and 15th Street corner, at the rate of $8,000 per lot, plus fifty per cent., equals $12,000. The interior 78 feet 3 inches at $8,000 per lot, or $320 a front foot, makes a total of $25,040, or total for the Avenue D frontage of $37,040, making a total for the block $518,360, which I have added because of the entire block being in one ownership, 12 per cent., making a total of $580,560, which I have called $580,500.

Q. That block is covered entirely by the works of the gas company?

A. Entirely by the works of the gas company.

Q. What has been your experience in handling bulkhead property?

A. I have never managed any, I have never leased any; I have sold one long one.

Q. Was that in the City of New York?

A. That was in the City of New York, and I have heard testimony in condemnation proceedings for the acquirement of bulkhead property; I have read the testimony given by various witnesses in condemnation of various bulkhead properties; I know from the records in the Comptroller's office some of the prices paid for bulkheads along the East and North Rivers; also for land under water in connection with those bulkheads.

Q. Where was this property which you sold, the long bulkhead?

A. 215th Street and 218th Street, in the Harlem ship canal, an irregular piece of property in the neighborhood of 1100 feet long.

1101 Q. Was that improved?

A. It was bulkheaded.

Q. Will you state what calculation you made in regard to this particular bulkhead property?

A. I consider the bulkhead between 14th and 15th Street is 225 feet long, and I take the front foot value for that particular bulkhead of $375, or a total for the bulkhead between 14th and 15th Streets of $84,375; for the bulkhead between 15th and 16th Streets, being 225 feet long, I take a value of $350 a front foot, making a total of $78,750, making a total of $163,125 for the two bulkheads from 14th to 16th Streets, exclusive of 15th Street.

Q. Turn to Exhibit 49, have you made any calculation of this property, divided to show the difference between page 3 of Exhibit 48 and the entire plot as shown on Exhibit 49?

A. I have figured the value of the property as shown on Exhibit 48, and also shown on Exhibit 49. I have not got the difference in values in each plot. I can readily get them.

By Mr. MATHEWSON:

Q. You could give the totals?

A. I could give the totals of each.

By Mr. PAGE:

Q. You have not as yet given that in the testimony? I have given it as before the proceedings began.

Q. So that your testimony in relation to the property between 16th Street and 20th Street west of 10th Avenue would relate to the property entirely as it appeared on Exhibit 49?

A. Yes.

Q. Now, you might take up Block No. 688.

A. As described above?

Q. Yes.

A. The block between 16th and 17th Streets, 10th Avenue

1102 and 11th Avenue, I place a unit value on 11th Avenue of $12,500, on 10th Avenue, $15,000, on 16th Street, $11,500, 17th Street, $11,000; taking first the 10th Avenue frontage there are two corners which at the rate of $15,000 per lot plus 50 per cent. or $15,000, equal $45,000; there are 134 interior front feet which at the rate of $15,000 per lot or $600 per front foot will make $80,400, or a total for the 10th Avenue frontage of $125,400. 11th

Avenue frontage, there are two corners which at the rate of $12,500 per lot plus 50 per cent. equals $37,500. There remain 134 interior feet which at the rate of $12,500 per lot or $500 per front foot equals $67,000 or a total for the 11th Avenue frontage of $104,500. On 16th Street there are 24 lots which at the rate of $11,500 per lot equals $276,000; minus 3 per cent. on account of the lots being short, making on 16th Street frontage $267,720. On 17th Street frontage there are 24 lots which at the rate of $11,000 per lot equals $264,000, from which 3 per cent. is deducted on account of the lots being short, making the total for the 17th Street frontage $256,080, making a total for the block of $753,700, to which is added because of the one ownership of the block 12 per cent., or a total of $844,144, which I have called $844,000.

Q. Now, generally, have you dealt in property in this immediate neighborhood?

A. Fairly close to this.

Q. And have you taken your unit of value for these properties as based upon those that you have dealt in in the immediate neighborhood?

A. I have given those consideration.

Q. Were any of those properties opposite a gas works?

A. No. Not these gas works.

Q. Were they opposite any gas works?

A. No, they are not. The properties I sold in this section are not opposite gas works.

1103 Q. Now, if you will take Block 689.

A. That is the block between 17th and 18th Streets, Tenth and Eleventh Avenues, I think. My unit for Eleventh Avenue is $12,000, for Tenth Avenue $14,500, for 17th Street $11,000 and for 18th Street $10,500. Taking first the Tenth Avenue frontage, there are two corners which at $14,500 per lot, plus 50 per cent., equal $43,500. There are 134 interior front feet, which at $14,500 per lot, or $580 per front foot, equal $77,720, or a total value for the Tenth Avenue frontage of $121,220. On the Eleventh Avenue frontage there are two corners which at $12,000 per lot plus 50 per cent. equal $36,000. There are 134 interior front feet, which at $12,000 per lot, or $480 per front foot, equal $64,320, or a total for the Eleventh Avenue frontage of $100,320.

On 17th Street there are 24 lots at $11,000 per lot, which equal $264,000, minus 3 per cent. because of the shortness of the lots, making $256,080. On 18th Street there are 24 lots at $10,500 per lot or $252,000 less 3 per cent. for the shortness of the lots, making $244,440 for the 18th Street frontage; total for the block $722,060, adding for size 12 per cent. we have $808,707, which I have called $808,500.

Q. Now take Block 690.

A. That is the block next north, isn't it?

Q. Yes.

A. The Tenth Avenue unit is $14,000, the unit for 18th and 19th Streets is $10,500. Taking first the Tenth Avenue frontage there are two corners at the rate of $14,000 per lot plus 50 per cent., which

equals $42,000. There are 134 interior front feet which at $14,000 per lot or $560 per front foot equals $75,040, making a total for the Tenth Avenue frontage of $117,040. On the 18th Street frontage there are 17 lots at $10,500 per lot, or a total of $178,500, less 3 per cent. for the shortness of the lots, which makes a total for the 18th Street frontage of $173,145. On 19th Street there are 12
1104 lots owned by the Gas Company, at $10,500 per lot, making $126,000, less 3 per cent. on account of shortness of lots, which makes a total for 19th Street frontage of $122,220, or a total for the block of $412,405, to which is added 10 per cent., making $453,645, which I have called $453,500.

Q. The next is Block 691.

A. Being between 19th and 20th Streets. My unit of value on Eleventh Avenue is $12,000, on 19th Street, $10,500, and on 20th Street, $11,000. Taking the Eleventh Avenue frontage first, there are two corners which at $12,000 per lot plus 50 per cent. equal $36,000. There remain 134 interior front feet which at $12,000 per lot or $480 per front foot equal $64,320, or a total for the Eleventh Avenue frontage of $100,320. On 19th Street, there are ten lots at $10,500, which equal $105,000, less 3 per cent. on account of shortness of the lots, or a total for 19th Street of $101,850. On 20th Street there are ten lots at $11,000, making $110,000, less 3 per cent. on account of the shortness of the lots, which equal $106,700, or a total for the plot of $308,870, plus 10 per cent. for size, making a total of $339,757, which I have called $340,000.

Q. Now take 666.

A. Being block between 16th and 17th Streets, Eleventh and Thirteenth Avenues. My unit of value is $12,000, but because all the lots have frontage on streets or avenues, I increase the unit by 50 per cent., making the unit $18,000. There being a total of three and one-half lots, and a lot being worth $18,000, I figure the total to be worth $63,000. I add nothing for size, because the block is very small.

Q. You say your unit of value is $12,000?

A. Yes.

Q. How do you arrive at that?

A. $12,000?

Q. Yes; that is, a lot 25 by 100, situated where, would be worth $12,000?

1105 A. Fronting on one or the other avenue, either Eleventh or Thirteenth Avenue. It is a hypothetical lot.

Q. Proceed.

A. The next block, 17th and 18th Streets and Eleventh and Thirteenth avenues, my unit of value is $12,000. This is lot 12, block 666. On the Eleventh avenue frontage there are two corners at $12,000, plus fifty per cent., which equal $36,000. There are 134 interior front feet which at $12,000 per lot, or $480 per front foot, equal $64,320, or a total for that frontage of $100,320. The lots being 80 feet deep I consider them worth 91 per cent. of the total value, or $91,291.

There remains a parcel 42 feet on 18th street by 188 feet, 9 inches

on 13th Avenue, being the entire 13th Avenue frontage. This plot has an average width of 21 feet and a depth of 184 feet, making a total of 3,864 square feet, of which amount 2,500 square feet are taken out for a corner, which at the rate of $7.20 per square foot, or $12,000 per lot, equal $18,000. There remain 1,364 inside square feet at $4.80 per square foot, making $6,547, or a total of $115,838, adding 10 per cent. for size, equals $127,421, which I have called $127,500, which makes an average lot value, including corners, for the plot of $15,525, or an average square foot value of $6.21.

Q. Now omitting the bulkheads as you will probably be examined by the city on that, take Block 716, lot 14.

A. What location is that?

Q. That is east of 10th Avenue.

A. I have it. My unit of value is $13,500, the plot being 75 by 92. I consider the plot as being 100 feet in depth and at $13,500 per lot would make $40,500, less three per cent. on account of the shortness of the lots, or a total of $39,285, plus five per cent. for size, making a total for the plot of $41,249. I have made this $41,500 and I add $4,000 for the buildings, making a total of $45,500.

Q. What buildings are on this property?

1106 A. On the east side there is a two-story building and stable, approximately 25 by 92, in which there are 12 stalls on the ground floor, with hay above. On the west side there is a two-story brick building in front of that lot, used as a garage on the ground floor; the size of the building is 25 by 28, more or less. The second floor is used by the foreman for living rooms, and in the rear of this building there are sheds built of frame with tar roofs.

Q. You value the——

A. All those buildings at $4,000.

Q. You figure the buildings in to make it $45,500?

A. Yes, sir.

Q. Now we will take the plot on the opposite side of the street, being Block 715.

A. The unit of value is $13,500. There are nine lots at that rate, making $121,500, less three per cent. on account of the shortness of the lots, making a total of $117,855, and adding to this eight per cent. on account of size equals $127,283, which I have made $127,500.

Q. Block 951, on page 4 of Exhibit 48, take that next?

A. Being on the south side of 20th Street, west of Avenue A, the unit value is $9,000. There are 176 interior front feet, which at the rate of $9,000 per lot, or $360 per front foot equals $63,360, less 3 per cent. depth, making a total of $61,460, to which is added 7 per cent. for size, or a total of $65,762, which I call $66,000. For the buildings I add $10,000, making a total of $76,000.

Q. What are the buildings there?

A. On the front of the lot there is a two-story brick stable 176 feet long by about 30 feet deep, in which there are 104 stalls used by the Consolidated Gas Company, with hay and grain stored above. The brick walls are unfinished; the building is about 30 years old.

Around the rest of the plot and about 15 feet deep there are a series of sheds built in 1903.

1107 Q. Now, you may proceed with the next, being block No. 952?

A. Being on the west side of Avenue A, running from 20th to 21st Street. The unit value on Avenue A is $11,000, on 20th Street $9,000, and on 21st Street $9,500. Taking first the Avenue A frontage, there are two corners, which at the rate of $11,000 per lot, plus 50 per cent., equals $33,000. There are left 134 interior front feet, which at $11,000 per lot, or $440 per front foot makes a total of $58,960, and added to the two corners makes a total for the Avenue A frontage of $91,960. On 20th Street there are 417 interior front feet, which at the rate of $9,000 per lot, or $360 per front foot equals $150,120; deducting 3 per cent. depth, we have $145,617. On 21st Street there are 417 interior front feet, which at $9,500 a lot, or $380 per front foot, makes a total of $158,460, from which I have deducted 3 per cent. for depth, or a total for the 21st Street frontage of $153,707, to which is added ten per cent. for plottage, or $430,412, which I have called $430,500, and I have added $9,000 for the buildings, making a total of $439,500.

Q. What buildings are there on that?

A. The buildings are Nos. 333 and 335 Avenue A. No. 333 is approximately 20 by 50 on lot 20 by 68, a four-story brick tenement, very old, but has been painted and papered, and the plumbing has been made to conform to the law. There is one tenant on each floor. Each tenant has four rooms. The interior rooms are lighted by shafts, and 335 Avenue A has a building on lot 19 by 68, building 19 by 50. It is an old four-story brick tenement, painted and papered and occupied, and the condition is fair.

Q. Is that all the buildings there are on that plot?

A. Yes. Those were tenement houses in each case. I have the rents here if you wish them.

Q. Well, what are the rents?

1108 A. The rent of 333 Avenue A is $4,500, and the rent of 335 Avenue A is nothing. I understand it is occupied by the foreman of the works.

Q. You say the rent is $4,500?

A. Of that building.

By Mr. MATHEWSON:

Q. What building is that?

A. 333 Avenue A.

By Mr. PAGE:

Q. You value the two buildings at $9,000, and one of them rents for $4,500?

A. I value the two structures.

Q. At $9,000?

A. Yes.

Q. And one of them rents for $4,500?

A. One of the buildings with the land on it rents for $4,500.

Q. How much do you get a floor for four rooms on a floor in that neighborhood?

A. The first floor rents for $8, the second floor for $10.50, the third floor for $11.50, and the fourth floor for $11.50, making a total of $41.50.

Q. And that multiplied by 12 is how much?

A. Why, that would be $498 a year.

Q. Now take No. 953.

Mr. MATHEWSON: That No. 335 which the witness mentioned is the lot which I stated yesterday was occupied by the foreman of the works as part of his compensation. The rental the witness has given is of No. 333.

The WITNESS: Block No. 953, the unit on First Avenue is $16,000, on Avenue A, $12,000, on 21st Street, $9,500, and on 22d Street, $10,000. Taking first the First Avenue frontage, there are two corners at $16,000 per lot, plus 50 per cent., or a total of $48,000. There are left 147½ interior front feet which at $16,000 per lot or $640 per front foot make a total of $94,400, or a total for the
1109 First Avenue frontage of $142,400. On the Avenue A frontage there are two corners, which at the unit of $12,000 per lot or $480 per front foot plus 50 per cent. equal $36,000. There are left 147½ interior front feet, which at the rate of $12,000 per lot or $480 per front foot equal $70,800, or a total for Avenue A of $106,800. On 21st Street there are 413 interior front feet, which at $9,500 per lot or $380 per front foot equal $156,940. On 22d Street there are 413 interior front feet, which at $10,000 per lot or $400 per front foot equal $165,200, or a total of $571,340, to which is added 12 per cent. for the ownership of the entire block, making a total of $639,900, which I have considered as $640,000.

Block No. 979, lot No. 1, being the block bounded by 21st Street, 22d Street the marginal street and Avenue A. The unit of value of the marginal street is $11,000, of 22d Stre-t it is $8,500, on 21st Street $8,000 and on Avenue A $12,000. Taking first the Avenue A frontage, there are two corners at $12,000 per lot plus 50 per cent., which equals $36,000, leaving 147.5 interior front feet which at $12,000 per lot or $480 per front foot equals $70,800, or a total for the Avenue A frontage of $106,800. Next, the 22d Street frontage, there are 494½ interior front feet at $8,500 per lot or $340 per front foot, which equals $168,130. And on 21st Street there are 494½ interior — feet, which at $8,000 per lot, or $320 per front foot, equal $158,240. The last is the frontage on the marginal feet, being 165.55 feet on 21st Street, 197½ feet on the marginal street, which triangle has an area of 16,347 square feet, from which is deducted 5,000 square feet for two corner lots, which at the rate of $11,000 per lot, plus 50 per cent., equals $33,000, leaving 11,347 square feet, which at the rate of $11,000 per lot, or $4.40 per square foot, equal $40,926, or a total for the block of $516,096, to which is added 12 per cent. for plottage, making a total for the block of $578,-
1110 027, which I have called $578,000.

The next is Block 978, being the block bounded by 20th and 21st Streets, Avenue A and Avenue B, with the exception of a

lot 23 by 70 in about the center of the Avenue A frontage. The unit on Avenue A is $11,000, on Avenue B $9,500 and on 21st and 20th Streets it is $8,000. The first is Avenue A, two corners at $11,000 plus fifty per cent. equals $33,000. There are 111 interior front feet at the rate of $11,000 per lot, or $440 per front foot equals $48,840. The rear of the lot is not owned by the gas company and is 23 by 30 feet. I consider this lot as 23 by 100. The value at $11,000 per lot is $10,120. The frontage of this lot is 23 by 70, which is equal to 84 per cent. of the above figure, or $8,500. The difference in value therefore between a lot 23 by 100 and the lot as shown, being 23 by 70, is $1620, or a total for the Avenue A frontage of $83,460. On the Avenue B frontage there are two corners at $9,500 per lot, plus fifty per cent., which equal $28,500. There are 134 interior front feet at $9,500 per lot, or $380 per front foot, which is equal to $50,920, or a total of $79,420. On 20th and 21st Streets, there are 932 interior front feet at $8,000 per lot or $320 per front foot, equaling $298,240, or a total for the block of $461,120, to which is added 12 per cent. plottage, which equals $55,334, making a total of $516,454, which I have called $516,500, to which is added $21,000 for the buildings. The buildings are Nos. 326 and 328 Avenue A. 326 Avenue A is the corner of 20th Street. The building is approximately 23 by 50, a four-story brick tenement, very old, but has this year been put in fair condition, being papered and repaired and one watercloset being put beneath the floor. Some new woodwork has been added. The store on the ground floor is leased and the upper part will be occupied
1111 by one family on each floor from the first of August. Each floor has seven rooms and water closets. The rent of the building is $1,080 per annum. This particular piece I value at $7,000.

The Nos. 328 and 330 Avenue A are each 23 by 50 feet, more or less; they are old, brick tenements, recently painted and with water closet on each floor and an airshaft cut between them. There is one family on each floor and each has six rooms and a closet. The rent for a year of 328 is $960, and of No. 330 it is $876. I value each of these at $7,000.

The next plot is No. 987 and faces on Avenue B, marginal street, 20th and 21st streets. The unit of value, including corner, is $10,000. Dividing it into two plots, the first faces 84.54 feet on 20th and 21st Streets each, and 184 feet on Avenue B. The plot there is 15,548 square feet. In the second plot, which faces 154.24 feet on 20th Street and 184 feet on the marginal street, there are 14,190 square feet, or a total of 29,738 square feet, or 11.895 lots, which at $10,000 per lot equals $118,895, to which is added for plottage, ten per cent., making a total for the block of $130,784, which I have called $130,500.

The next is plot 1090, being on the north side of 42nd Street, west of Eleventh Avenue. Unit of value, $12,000; 150 feet by 100 feet 5 inches, at $12,000 per lot equals $72,000; plus for plottage 7 per cent., or a total of $77,040, which I have called $77,000.

The next is block 1071, plot on north side of 42nd Street, east of Eleventh Avenue. Unit of value, $14,000; plot 100 feet by 100

feet at $14,000 per lot equals $56,000; plus for plottage 7 per cent. equals $59,900, which I have called $60,000.

Block number 1070, being a plot on the north side of 41st Street, east of Eleventh Avenue. Unit of value, $10,000; 200 feet by 98 feet 9 inches, at $10,000 equals $80,000; plus for plottage 7
1112 per cent., or a total of $85,600, which I have called $85,500.

Block number 1089, being the entire block from Eleventh Avenue to the bulkhead line, 41st Street to 42nd Street; unit of value north one-half of Eleventh Avenue $12,000; south one-half of Eleventh Avenue $10,500; 42nd Street unit, $12,000; 41st Street unit, $7,000.

The first is 42nd Street frontage. From the east line of Twelfth Avenue to Eleventh Avenue, 701 feet 4 inches, at the rate of $12,000 per lot, or $480 per front foot, $336,600.

Eleventh Avenue, north one-half, corner 25 by 100 feet at the rate of $12,000 per lot, plus 50 per cent. equals $18,000. 73 feet 9 inches interior front feet at $12,000 per lot, or $480 per front foot, $35,400, or a total of $53,400.

Eleventh Avenue, south one-half, corner 25 by 100 feet, plus 50 per cent. at a unit of $10,500, equals $15,750. 73 feet 9 inches at $10,500 per lot, or $420 per front foot, equals $30,975, or a total for the south one-half of Eleventh Avenue, $46,725.

Forty-first Street, 700 feet at $7,000 per lot, or $280 per front foot equals $196,000.

From the east line of Twelfth Avenue to the bulkhead on 42nd Street there are ten lots at $12,000 per lot, or $120,000.

Forty-first Street, ten lots at $7,000 per lot, $70,000, or a total for that plot of $190,000, making a total for the entire upland of $822,725. The plottage is figured on the upland, plus the bulkheads and land under water, and since the bulkhead values are not given at this time we cannot figure the plottage in.

In giving this land value I find that I made an error in figuring the units for 41st Street, which will change the total of plots 1089 and 1107, combined, to $1,154,500, instead of $1,166,000, as
1113 given in my direct testimony. This will change the total for the entire holdings in Manhattan and Shadyside to $15,951,500 instead of $15,964,500, as given in my direct testimony, and will make the value of the Manhattan realty alone $15,651,500 instead of $15,964,500.

Block No. 1092, being the block bounded by 44th Street and 45th Street and the bulkhead. The unit of value for 44th Street, $8,000. Unit of value for 45th Street, $7,500.

Forty-fourth Street, 38 lots at $8,000, $304,000.

Forty-fifth Street, 37 lots at $7,500 per lot equals $277,500, or a total of $581,500. Since I cannot give the bulkhead values at this time I am unable to add the plottage, since the plottage should be added to the uplands, bulkheads, and land under water.

The buildings on this land I have valued at $10,000. They comprise three tenements, 606, 608 and 610 West 45th Street, each 16 feet 8 inches by 45. There are three 3-story brick tenements with one 2-story extension on the building No. 606 built of brick and in very poor shape; water closet is in the cellar. One tenant on a floor.

I could not get the rents from the tenants. I valued each of these buildings at $3,000.

The remaining tenement is 605 West 44th Street. The building itself is 25 feet by about 27 feet with an extension on the west side of the rear. It is wooden and in very poor shape. There are two families in it and total rent per year is $360. I valued this frame building at $1600.

Block 1093, being bounded by 45th Street and 46th Street and the bulkhead. Unit of value on 45th Street $7,500. Unit of value on 46th Street, $8,000.

45th Street, 33 lots at $7,500 equals $247,500. On 46th Street 30 lots at $8,000 per lot, $240,000, or a total of $487,500.

1114 Since I cannot give the bulkhead values at this time, I cannot add plottage, since plottage should be added to the combined values of the upland, bulkhead and land under water.

Block No. 1457, being plot west of Avenue A between 62nd and 63rd Streets.

63rd Street unit $8,500; 62nd Street unit, $8,000.

62nd Street; 266½ front feet at $8,000 per lot or $320 per front foot equals $85,280.

63rd Street. 216½ front feet at $8,500 per lot, or $340 per front foot, equals $73,610, or a total of $158,890. To which is added ten per cent. for plottage, or a total of $174,779, which I have called $175,000.

Block No. 1455, being on the west side of Avenue A from 60th Street to 61st Street.

Avenue A unit, $10,000. 60th Street unit, $7,000; 61st Street unit, $7,500.

Avenue A. Two corners at $10,000 a lot plus 50 per cent. equals $30,000. 150 feet 10 inches interior front feet at $10,000 per front foot equals $60,332 or a total for Avenue A frontage of $90,332.

60th Street. 213 feet at $7,000 per lot, or $280 per front foot, equals $59,640.

61st Street, 213 front feet, at $7,500 per lot, or $300 per front foot, equals $63,900, or a total of $213,872, to which is added ten per cent. for plottage or $235,259, which I have called $235,000.

Plot No. 1474, being on the east side of Avenue A, fronting on 60th Street. Unit, $8,000. Corner 25 feet by an average of 60 feet deep. A corner 25 by 100 feet at $8,000 plus 50 per cent. equals $12,000. The average depth being sixty feet, I consider that this lot should figure 76 per cent. of the total, or $9,120. Interior 89½ by 100 feet at $8,000, or $320 per front foot, equals $28,640. The average depth being 46 feet, I consider equal to 62 per cent. of the whole, or $17,756, or a total for the plot of $26,876, which I have called $27,000.

1115 Block 1177, between West End Avenue and the railroad track, 65th Street and 66th Street.

West End Avenue unit $7,500; street unit $6,000.

West End Avenue, two corners at $7,500 per lot, plus 50 per cent., equals $22,500. 150 feet 10 inches at $7,500 per lot, or $300 per front foot equals $45,249, or a total for the West End Avenue front of $67,749.

The streets. 199 feet 9 inches on each street, or 399 feet 6 inches front on both streets, at the rate of $6,000 per lot, or $240 per front foot, equals $95,880.

There remains a triangle facing 44 feet on 66th Street, nothing on 65th Street, and fronting 200 feet 10 inches, or a total 4,418 square feet, which at $6,000 per lot, or $2.40 per square foot equals $10,603, or a total for the three plots of $106,483, making a total for the plot of $174,232, to which I added 10 per cent. for plottage, making a total of $191,655, which I have called $191,500.

Block 1157, between Amsterdam Avenue, West End Avenue, 65th Street and 66th Street.

Amsterdam Avenue unit $19,000. Street units $8,000. West End Avenue unit $8,000.

Amsterdam Avenue, two corners at $19,000, plus 50 per cent., equals $57,000. 150 feet 10 inches of interior front feet at $19,000 per lot, or $760 per front foot equals $114,630, or a total for the Amsterdam Avenue frontage of $171,630.

West End Avenue, two corners at $8,000 a lot, plus 50 per cent., equals $24,000. 150 feet 10 inches at $8,000 per lot, or $320 per front foot equals $48,265, or a total for the West End Avenue frontage of $72,265.

The Streets. 48 lots at $8,000 per lot, total $384,000, making a total for the block of $627,895, to which is added on account
1116 of the whole block being in one ownership, 12 per cent., making a total of $703,242, which I have called $703,000.

Block 1156, being plot on the south side of 65th Street west of Amsterdam Avenue. Unit of value $8,000. Four lots composing plot at $8,000 equals $32,000, plus for the size 7 per cent., equals $34,240, which I have called $34,500 for the land, and I add for the building $7,000, which makes a total for the land and building of $41,500.

The building is numbered 222 West 65th Street, 25 by 55 feet approximately. An old four-story brick tenement, two families on a floor, each four rooms. One water closet on each floor. Washtubs and sink in each kitchen. Condition is poor. Total rent per annum I learned to be $1,248. I figure the value at $7,000.

Plot 1670 between First and Second Avenues and 98th and 99th Streets.

Second Avenue unit, $15,000. 98th Street unit, $10,000. 99th Street unit, $10,000. First Avenue unit, $11,000. Second Avenue, two corners at $15,000, plus 50 per cent., $45,000. 151 feet 10 inches interior front feet at $15,000 per lot, or $600 per front foot, equals $91,098, or a total for the Second Avenue front of $136,098.

First Avenue, two corners at $11,000 per lot plus 50 per cent. equals $33,000. 151 feet 10 inches interior front feet at $11,000 per lot or $440 per front foot equals $66,805 or a total of $99,805.

Streets. 36 lots, at 10,000 per lot, $360,000, or a total for the block of $595,903, to which I added 12 per cent. on account of the whole block being in one ownership, or $667,411, which I have called $667,500.

Block 1692, between marginal street and First Avenue, 98th and 99th Streets.

First Avenue unit $10,000; marginal unit and street unit $7,500.

1117 First Avenue frontage, two corners at $10,000 per lot, plus 50 per cent., $30,000. 151 feet 10 inches of interior front feet at $10,000 per lot, or $400 per front foot, equals $60,732, or a total for the First Avenue frontage of $90,732.

Streets. 170.24 feet by 201.83 feet equals 34,360 square feet, at the rate of $7,500 per lot or $3 per square foot, equals $103,080.

Triangle facing 100.33 feet on 99th Street, being in depth 100.915, equals 10,134 square feet at $3 per square foot, $30,402, of which 5,000 square feet are for corner lots, at $7,500 per lot, plus 50 per cent., equals $7,500, or a total for the block of $231,714, to which I added 10 per cent. for plottage, or a total of $254,885, which I have called $255,000.

Block 1683, fronting on First Avenue, 111th and 112th Streets.

First Avenue unit $12,500. 111th Street unit $9,000, 112th Street unit $10,500.

First Avenue corner, 25 x 100 feet, at the rate of $12,500, plus 50 per cent. equals $18,750. 50 feet 11 inches, say 51 feet, of interior front feet at $12,500 per lot, or $500 per front foot equals $25,500, or a total for the First Avenue frontage of $44,250.

111th Street, 5 lots at $9,000 equals $45,000. 112th Street, 2 lots at $10,500, $21,000, or a total of $110,250. Plus 10 per cent. for plottage $121,275, which I have called $121,000.

Block 1682, west side of First Avenue, between 110th and 111th Streets.

First Avenue unit $12,000. 111th Street unit $10,000.

First Avenue, 2 corners at $12,000, plus 50 per cent. equals $36,000. 151 feet 10 inches of interior front feet at $12,000 per lot, or $480 per front foot equals $72,878, or a total of $108,878.

1118 For the First Avenue frontage, 30 street lots at $10,000 equals $300,000, or a total of $408,878, plus 10 per cent. for plottage makes $449,765, which I have called $450,000.

Block 1704, between Pleasant Avenue, First Avenue, 110th Street and 111th Street.

First Avenue unit, $10,500. 110th Street unit, $7,500. 111th Street unit, $8,500. Pleasant Avenue unit, $8,500.

First Avenue, two corners at $10,500, plus 50 per cent., equals $31,500. 151 feet 10 inches of interior front feet at $10,500 a lot, or $420 per front foot, equals $63,768, making a total for the First Avenue frontage of $95,268.

Pleasant Avenue, two corners at $8,500, plus 50 per cent., or $25,500. 151 feet 10 inches of interior front feet at $8,500 per lot, or $340 per front foot, equals $51,622, making a total for Pleasant Avenue, $77,122.

Streets. 110th Street, 413 interior front feet at $300 per front foot, $123,900. 111th Street, 413 feet at $340 per front foot, $140,420, or a total of $436,710, to which I added 12 per cent. for plottage to make it $489,115, which I have called $489,000.

Block 1712. This I cannot give the bulkhead figures, so it must be omitted for the present.

Block 1999, being on the east side of Twelfth Avenue and facing on 133rd and 132nd Streets. 12th Avenue unit, $8,500. Street unit, $7,500.

12th Avenue two corners at $8,500 per lot, plus 50 per cent., equals $25,500. 150 interior front feet at $8,500 per lot, or $340 per front foot, equals $51,000 or a total of $76,500.

Streets. In all, 1,125 interior front feet, or 45 lots at 7,500 a lot, equals $337,500, or a total of $414,000, to which I added ten per cent. for plottage, making it a total of $455,400, which I have called $455,500.

1119 & 1120 Block 2175, plot facing on Broadway and Sherman Avenue. In this plot, by dividing it into seven parcels, I find 67,069.44 square feet, which is equal to 26.80 lots. Considering the Sherman Avenue lots at $3,500, the marginal lots at $5,000 and the interior lots $900, I have averaged the lot value as $3,000, making it a total of $80,400, which I have called $80,500, to which I have added ten per cent. for plottage, or $89,000.

Adjourned to Aug. 23rd, 1906, at 1:30 P. M.

Last Exhibits:

Complainant's 100.
State's N.
City's 34.

1121 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, THURSDAY, *August* 23, 1906—
1:30 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Page, Mr. Mathewson, Mr. Gans, Mr. Burr.

1122 WILLIAM H. WHEELOCK resumed.

Cross-examination by Mr. PAGE continued:

Mr. WHEELOCK: In the record of yesterday, on page 1075, third line from the bottom, it should be, to "the line of" instead of "to the land."

On page 1087 the figures should be $15,964,500 instead of $15,664.50.

On the top of page 1113, sixth line, the same correction should be made as to the figures there stated.

Q. You have now given us the methods of arriving at the valuation of all the properties that you have testified to on your direct-examination, have you?

A. Yes. There is one exception, I think, and that is the Shadyside property. I finished testifying last night on the Manhattan property.

Q. And also I have not cross-examined you as to the bulkheads?

A. No; and in giving my figures on property where there are bulkheads as Mr. Burr asked, I left out the bulkhead figures and could not complete the figures of the block because in several instances the bulkheads had to be considered as part of the block and plottage added. I can give you those instances, if you wish them.

Q. I think it might be well to indicate them?

A. The first is on page 5 of the Exhibit 48, including the entire block from 11th Avenue to 13th Avenue. In that case the upland value showed a total of $822,725. I then added for the bulkhead $118,500, and for the land under water $89,723, making a total for the upland, bulkhead and land under water of $1,030,948, to which total I added on account of the size of the holding and on account of the conjunctive ownership of the upland and land under water and bulkhead, 12 per cent., making a total for the parcel of $1,154,500. That completes that instance.

1123 The next is on page 6 of the map, Exhibit 48*a*, and is for the block bounded by 44th and 45th Streets, and running out to 13th Avenue. The total value of the upland I have made $581,500, to which was added $120,000 for the bulkhead, and for the land under water $110,771, making a total of $812,271, to which on account of the conjunctive ownership I have added 12 per cent., making a total for the block of $909,743. To this was added buildings to the amount of $10,000, making a total for the land and buildings of $920,000.

The next block is the one directly north of this, between 45th and 46th Streets, and the value of the land I made to be $487,500, to which was added for bulkheads $120,000 and for the land under water $106,128, or a total of $713,628, to which was added for conjunctive value 12 per cent., or $799,263, which I have called $800,000.

The next is on page 10. The length of the bulkhead on the east side of Pleasant Avenue, from the north side of 110th Street to the south side of 111th Street is 212 feet, which I have valued at $53,000. The remainder of that plot, or all land under water, I have made $18,000, or a total of $71,000. That completes the——

By Mr. MATHEWSON:

Q. Did you testify as to the bulkheads on page two of Exhibit 48?

A. That went in before, Mr. Mathewson, as we were going along.

Q. And also bulkheads and land under water adjoining the West 18th Street property, page 3 of Exhibit 48?

A. I think I gave that. We can put it in. I am not quite sure.

Q. You have given $148,500 as the value of the bulkheads there. I don't think you gave that conjunctively with the others?

A. No, there was no conjunctive value there; at least I
1124 did not so consider it.

Q. No conjunctive value, as far as the bulkheads were concerned?

A. No, sir.

By Mr. PAGE:

Q. I notice in some instances that you have valued buildings and in other instances you have not, although there were buildings on the property. Why was the distinction made?

A. The only buildings which I valued were those which might be called tenement houses and were, so far as I knew, not used in connection with the manufacture of gas.

Q. Did you receive any instructions from whoever employed you on behalf of the gas company as to what properties you were not to value the buildings upon, and as to which you were?

A. I was told I was not to value buildings used by the company in its own business.

Q. So that wherever buildings were valued, they would be on property that was not used in the business of the company?

A. The land immediately under those buildings, yes.

Q. How about the rest of the land that was not immediately under the buildings?

A. I valued all the land.

Q. Yes, I know you did. And now the question is put to you relating to the properties on which you valued the buildings. If there was a tenement house there was some yard in connection with the tenement house, wasn't there?

A. Yes, in almost every instance.

Q. As a matter of fact is there any one of these plots that you have testified to upon which buildings were erected where the land was used for the purpose of the company and the building not?

A. I don't recollect any.

1125 Q. What is your age?

A. 30 years and 8 months.

Q. How long have you been engaged in the real estate business in the city?

A. A little over eight years.

Q. And all of that time you have been either in the employ of or connected with Charles S. Brown & Company, or the Corporation of Douglas-Robinson. Chas. S. Brown & Company?

A. Originally with Mr. Douglas Robinson alone; afterwards with the firm of Douglas Robinson, Chas. S. Brown & Company, and after that as member of the Corporation of Douglas Robinson, Chas. S. Brown & Company.

Q. What was the position that you first held with Douglas Robinson?

A. Wrote out repair orders, I think.

Q. How long did you continue with Douglas Robinson prior to the formation of the firm?

A. Almost exactly four years.

Q. Douglas Robinson's business was largely the collection of rents and the management of estates, was it not?

A. No, I don't think so. That was a small part of it. I may say that Mr. Robinson outside of his own office looked after personally one or two estates in the offices in which these estates were managed, but not in his own office.

Q. How long did you continue to write repair orders?

A. About three months.

Q. Then what was your next position?

A. I moved to the Park Row Building and leased offices for several months.

By the MASTER:

Q. You mean in that building?

A. In that building when it was first opened.

1126 By Mr. PAGE:

Q. Was that as a branch office of Douglas Robinson?

A. The building was put in our care and I was renting agent for Mr. Robinson on the premises.

Q. I mean by that, it was not a separate venture of yours?

A. No, no.

Q. How long did you continue to manage that renting office in the Park Row building?

A. About three or four months.

Q. Then what did you do?

A. I went to the Lorillard estate's office in Mercer Street, and worked with the department of that office which had charge of the repairs of the buildings of the estate, and which were about 400, and also in the securing of tenants for their vacant properties.

Q. That was also a branch of Mr. Robinson's business?

A. Mr. Robinson went there every day for a couple of hours to superintend the running of that estate.

Q. How long did you remain there; did you say?

A. I remained in that position for six months. I then took the place of the head of that department and remained in charge of those 400 buildings for about nine months.

Q. Then what was your next position?

A. I was then recalled to the main office and put in charge of the buildings managed by Douglas Robinson & Co., which were about 700.

Q. And your duties in that regard I suppose were looking after repairs and seeing to the collection of rents?

A. And the making of leases.

Q. How long did you have charge of that department?

A. For about a year.
Q. What was your next position?
A. I started in the brokerage department in that office.
Q. And what do you mean by the brokerage depart-
1127 ment?
A. Trying to make sales, to make commission out of sales, whatever I could negotiate.
Q. Well, up to that time had Douglas Robinson been carrying on a sales brokerage business?
A. A very large one, yes, in two offices in the city.
Q. Then you were merely establishing that business in this particular office, is that it?
A. The brokerage business?
Q. Yes.
A. No. I joined the force of brokers in Mr. Robinson's office.
Q. I understood you to say that you then established a brokerage business in his office.
A. If I said that I was in error. What I intended to say was that I became a broker in the brokerage department of Mr. Robinson's office.
Q. And what were your duties in that department?
A. Making sales and keeping track of such sales as were made in the city generally, as far as possible.
Q. How long were you employed in that capacity?
A. Until Mr. Robinson united with Mr. Charles S. Brown, which was four years ago this last May.
Q. And since then——
A. At that time on account of the large number of additional properties being put in our hands to manage I was asked to give up the brokerage work for the time being and organize the management of the estates and buildings. I left that department after three months' work and went back to the brokerage again.
Q. And since that time——
A. I have been a broker and in the last two years added appraising to that, the last two and one-half years, making it a specialty.
Q. I suppose there is besides yourself a large force of others in the office that attend to the brokerage, the buying and selling on commission?
A. There are some in both our offices.
Q. And in speaking of the sales that have been made I
1128 suppose you referred to sales that have been made in the office?
A. You mean when you asked if we made sales near the properties in question?
Q. Yes.
A. In some instances, my own and in other instances those made by the others in the office.
Q. What particular class of property have you been handling as a broker?
A. All kinds; no particular class.
Q. Have you been engaged in selling the properties of the estates

that were managed by the office or have you been selling property that was obtained from the general public?

A. Very largely from the general public, only five or six sales of property managed by our office, I think.

Q. Does your office deal particularly near the East Side water front?

A. Particularly?

Q. Yes.

A. No.

Q. Or near the West Side water front?

A. No.

Q. You have made no specialty then of properties in those localities?

A. In selling?

Q. Yes.

A. No.

Q. You have not made a specialty of handling water front property?

A. No.

Q. Have you bought and sold property to be used for manufacturing purposes?

A. Quite a little.

Q. In the City of New York?

A. Yes.

Q. In what particular section of the city?

A. In such places as factories would be required to go.

Q. And that would be mostly outside of the city, wouldn't it?

A. Not if you confined me to Manhattan.

Q. What locality did you sell this property in?

A. Well, I can think of one instance: The entire block bounded by 58th and 59th Streets, 11th Avenue and the River, to Mr. Belmont, for the power station for his tunnel.

Q. Would you call a power station attached to a rapid
1129 transit road or other railroad a manufacturing plant?

A. They manufacture electricity for the system.

Q. Well, I just want to get your idea of a manufacturing plant. Are there any others?

A. Yes, a plot I myself——

Q. Well, this Belmont property I judge then was not sold by you?

A. It was sold by our office.

Q. Well, I am speaking about your personal experience?

A. Personally, I sold within a short time three lots at Elm Street, now Lafayette Street, close to Canal Street, which is used as a factory.

Q. Three lots, each being 25 by 100?

A. No, being quite irregular; the frontage on Elm Street, as I remember it, was 75 feet; the greatest depth, if I remember correctly, was 97 feet; it was approximately 80 feet on the south line and some 95 feet on the north line.

Mr. PAGE: I think that is all.

The MASTER: Now, Mr. Burr, you may cross-examine.

Cross-examination by Mr. BURR:

Q. Referring to the bulkhead property which you sold, that was located, I understood you to say, at 235th Street?
A. 215th Street it began; the center of the block.
Q. When did you sell that?
A. The contract was closed on the 10th or 12th of June, of this year.
Q. Is that bulkhead physically built up or is it drawn to an imaginary line?
A. It is physically built up for almost the entire distance.
Q. How many feet were embraced in that bulkhead?
A. According to my diagram there were 1105 feet.
Q. What did that sell for per lineal foot?
1130 A. I can't tell you. It was included with a number of lots of upland.
Q. Then you have no knowledge as to the valuation placed upon that bulkhead per lineal foot?
A. By the seller?
Q. By the purchaser.
A. By the purchaser, no.
Q. Do you know whether the property you have testified regarding embraces all the real estate of the Consolidated Gas Company?
A. It is all that I have any knowledge of.
Q. Isn't it a fact that you have not bought or sold any property within a mile of the particular parcels regarding which you have testified?
A. Within a mile? No, it is not true.
Q. What is the nearest point to the gas plant itself that you have bought or sold property?
A. I, personally?
Q. Yes.
A. Well, certainly within two blocks.
Q. What parcel was that?
A. I may be slightly wrong in my distance, but I was thinking of 15th Street. I sold both sides of 15th Street from First Avenue to Avenue A and the block front on Avenue A from 14th to 15th Streets on the west side, and one-half of the block front from 15th to 16th Streets on the west side; in all, I should judge, 40 lots, to separate buyers.
Q. Well, that was the only occasion when you purchased or sold property within the immediate neighborhood of the gas plant property regarding which you have been testifying?

Mr. MATHEWSON: Do you mean any of it, Mr. Burr?
Mr. BURR: Any of it.

A. I would not be willing to say that, Mr. Burr, until I had examined my slips. I find another instance, if I am at liberty to state it. I made a sale of the lot and building, 543 West
1131 46th Street, which is within half a block of one of the gas plants. The contract was signed on April 27th, 1905. I also sold 319 East 58th Street in May, 1902, which was within two

blocks of the plant at 60th Street. I have another sale of the entire block from 66th to 67th Streets, Second to Third Avenues, which is within a block and a half of the gas plant. I think that is all that I find on my slips.

Q. All you know about the value of water front land is derived from your knowledge of the considerations paid for such lands?

A. In certain cases, Mr. Burr.

Q. Well, specify any case in which that is not all your knowledge, that all your knowledge is not derived from that fact, that you know the consideration paid?

A. I did not understand the question.

Q. You were asked on page 1075, "And have you had experience in the sale and have you kept posted as to the prices received for water front land in the course of your experience, as well as other land?

A. So far as considerations are shown. There are very few sales." Does that refer to water front land or all land?

A. No, bulkheads and water front properties.

Q. So that I say, all the information you have on that subject apart from the sale you made at 215th Street is derived from the considerations paid for the property.

A. Yes, except one other instance which is a sale in which I figured. I have already spoken of the block between 58th and 59th Streets to Mr. Belmont; that included bulkheads and water rights.

Q. Well, do you know what was paid per lineal foot for that bulkhead?

A. I know what we advised him we considered it worth.

Q. No, I want to know what was paid?

A. I know what was paid for the entire block and I know
1132 how he, in purchasing it, sub-divided it, if that is admissible.

Q. What was the value of the bulkhead property per lineal foot at that point?

A. He considered it in his purchase at $650 per front foot.

Q. That is the only way in which you arrived at any knowledge upon which to base any valuation on that bulkhead property?

A. In that particular place?

Q. In that particular place.

A. Yes.

Q. And do you undertake to give an opinion as to the value of bulkhead property on the East River from the prices paid for the bulkhead property at 59th and 60th Streets?

A. Not entirely, no. Very slightly, in fact.

Q. Do you undertake to testify as to the value of bulkhead property on the East River from your knowledge of what was paid or an apportionment of the price by the purchaser of that property at 59th and 60th Streets, taken in connection with your sale of bulkhead property at 215th Street?

A. Hardly at all.

Q. You have stated you never managed any bulkhead property or never leased any, and that your only experience was that sale at 215th Street?

A. That is true.

Q. Now, you have stated also that you followed up the proceedings in condemnation regarding bulkhead property.

A. I said that I had some knowledge of condemnation proceedings and the testimony and the awards.

Q. How far did your knowledge extend and how was it derived? From the reading of the testimony?

A. In many instances.

Q. Well, there was testimony pro and con, I presume, before the Commission?

A. Yes.

Q. Do you know what the Commission awarded?

A. In some cases.

1133 Q. Now, regarding all the property that you have testified to, can you say whether the value has increased of any portion of it within the past three years?

A. All of this property of the Gas Company?

Q. Yes.

A. Oh, yes, some of it has materially increased.

Q. Has some of it depreciated?

A. Yes.

Q. What property has depreciated in value?

A. Principally on the south side of 60th Street, which is to be under the new bridge.

Q. Any other property?

A. Any other?

Q. Yes.

A. No.

Q. To what extent has that property you have just referred to depreciated in your opinion?

A. My offhand opinion, 10 per cent.

Q. And to what extent has the remainder of the property increased?

A. That is very difficult to say, Mr. Burr.

Q. Would you say it had increased one per cent?

A. I should say it has increased nearer 25 per cent.

Q. So that there has been an appreciation in your opinion of this real estate of 25 per cent. since 1903?

A. Yes. I should think so; in some instances perhaps a little more, and in other instances not so much, but roughly. Please understand that that is not after seriously looking into the figures three years ago, but offhand opinion.

Q. Do you know who owns the bulkhead at 41st to 42d Street?

A. 41st to 42d? The Consolidated Gas Company.

Q. And North River?

A. Yes.

Q. Do you know what bulkhead rights are?

A. In a general way.

Q. What are they?

A. In the first place the right to construct a bulkhead at the edge

of the marginal street, and collect such dues as the law provides. That relates to bulkhead rights.

1134 Q. What dues have you knowledge of?

A. Such as are prescribed by law for the collection from vessels which may tie up to the docks.

Q. Do you know what wharfage and cranage is?

A. Yes.

Q. What is cranage?

A. Cranage and wharfage are practically synonymous. The terms have come down from the old deeds, and I beli-ve they mean the same thing.

Q. What do they mean?

A. The right to collect from vessels under 200 tons 2 cents a ton for twenty-four hours for tying up.

Q. Do you know whether the bulkheads you have testified regarding are private or public bulkheads?

A. That depends on whether they are owned by the Gas Company or some subsidiary company. I understand they are owned absolutely by the Consolidated Gas Company.

Q. And it was upon that understanding that you based your opinion?

A. Yes.

Q. Take the first instance of the bulkhead.

Mr. MATHEWSON: Do you mean page 3?

Mr. BURR: Page 3.

The WITNESS: Is it 14th and 15th or 18th Street?

Mr. MATHEWSON: 18th Street, I think.

The WITNESS: The first bulkhead testified to was 14th to 15th Street.

Mr. MATHEWSON: On page 2, 14th Street, east of Tompkins Street.

Q. What number of feet are embraced in that bulkhead property?

A. 450 lineal feet.

Q. And what value have you placed upon each lineal foot of that property?

1135 A. On the bulkhead between 14th and 15th Streets, $375; on the bulkhead between 15th and 16th, $350.

Q. Upon what do you base that valuation?

A. That is my opinion of what it is worth.

Q. Well?

A. I have considered other things.

Q. Upon what have you based your opinion?

A. I considered a sale which is very close to that.

Q. The consideration for the purchase of some property close to this?

A. Yes.

Q. Is that the sole basis of your opinion?

A. No, not entirely.

Q. Do you know of your own knowledge that that was the consideration paid?

A. Yes.

Q. What else entered into your judgment?

A. The physical character of the locality, the use to which it could be put, the current at that particular place, the number of wharves in the immediate neighborhood, the streets running down to the water front, the depth of the water in front of the bulkheads.

Q. Now, you base your opinion as to values, you have said, largely on the testimony given in condemnation proceedings. Have you any——

Mr. MATHEWSON: No, he did not say largely, I think. He said he had read testimony in condemnation proceedings among other considerations.

Q. Well, have you any knowledge of the accuracy or truthfulness of the testimony given in those condemnation proceedings, the examination of the testimony of which helped you to come to a conclusion?

A. I have read the stenographic reports of some of them; I cannot tell that they are correct.

Q. And you cannot say whether the Commissioners agreed or disagreed with the testimony given, in the awards?

A. I have one award close to this property. I know that the people owning it got so much money per front foot. That was awarded by the Commission and I presume it is correct.

1136 By Mr. MATHEWSON:

Q. Was that bulkhead property?

A. Bulkhead property.

By Mr. BURR:

Q. Near what street was that?

A. Between 20th and 21st Streets, East River.

Q. Do you know of any actual transactions which sustain your valuation of $375 per lineal foot for this property at Tompkins Street?

A. Any transactions that absolutely sustain?

Q. Yes.

A. No, I do not.

Q. Do you know of any actual transactions which sustain the valuation placed by you per lineal foot upon any of the bulkhead property you have testified to?

A. I think I can substantiate the $350 per lineal front foot.

Q. Well, if you can, please do so.

A. The gas company received in 1903 an award of $350 per front foot for its bulkheads from 20th to 21st Streets.

Q. From the city?

A. From the city.

By Mr. MATHEWSON:

Q. The City of New York were defendants in this action you refer to, were they not?

A. I presume so.

By Mr. BURR:

Q. Do you know the earning price per lineal foot of this bulkhead property?

A. To the company that owns it, do you mean, Mr. Burr?

Q. Yes.

A. No. The earning power? No, I have no idea, I should think it would be very great, indeed.

Q. Now, does the presence of the gas plant add to or depreciate from the value of the real estate regarding which you have

1137 been testifying?

A. Well, I have been testifying about the property included in the plants. I think if I may explain——

Q. What I mean is, if the gas plants were not there, what valuation would you put upon the land?

A. There would be a general appreciation, I think, of each section where the gas plant is at present.

Q. Well, in your opinion, to what extent would that go? Would that increase it 25 per cent. in value?

A. Over the present value?

Q. Over the present value that you have given with the gas plants there?

A. No, I do not think so, Mr. Burr, I think it would be less than that. It might be 15 per cent. or something like that.

Q. To the best of your knowledge and information and from your experience, it would appreciate fully 15 per cent. if the gas plants were removed?

A. That is my experience with nuisances.

By Mr. GANS:

Q. You do not think a gas plant a serious detriment to a neighborhood, then, Mr. Wheelock?

A. Yes.

Q. And thinking it a serious detriment to a neighborhood, you think its removal would make a difference of only 15 per cent. in its value?

A. That is quite a jump in real estate values.

Q. After the removal of a matter such as a gas plant?

A. Yes.

By Mr. BURR:

Q. But you have testified that the property has jumped 25 per cent. since 1903?

A. That is in line with the general appreciation in Manhattan Island.

Mr. MATHEWSON: Covering four years, not a single jump.

1138 Q. Has it increased 25 per cent. within the past two years?

A. The property that I have valued?

Q. Yes.

A. I cannot say that.

Q. How much would you say it had increased within the past two years?

A. Perhaps a proportionate amount, half of 25 per cent.

Q. You have given the price per lineal foot upon all this bulkhead property, have you?

A. In this proceeding?

Q. In this proceeding.

A. I believe I have entirely, yes, Mr. Burr.

Q. The property on 18th Street to 20th Street, you did not give the value of that. That property was taken by the city?

A. I believe it has been, yes. I put the value of each bulkhead as $148,500.

Q. At that point?

A. At that point.

Mr. MATHEWSON: Two bulkheads?

The WITNESS: Two bulkheads.

Q. Yes. From 16th to 18th Streets?

A. Yes, not including 17th Street.

Q. What are the dimensions of the bulkhead property alone?

A. In all 424 feet.

Q. And what did you allow there per lineal foot?

A. I allowed $700. But, Mr. Burr, pardon me one minute. I should say in valuing these 14th and 15th Street bulkheads, and in the West 16th and 17th Street bulkheads, the figures are made up of two items; one, what I consider the bulkhead worth in itself, and a small amount added in each case because of the combination across the street with the upland in the same ownership.

Q. What did you value the bulkhead right alone, or the bulkhead property alone at 14th and 15th Streets, per lineal foot?

A. The bulkhead between 14th and 15th Streets I valued at $325 per lineal front foot, and the bulkhead from 15th to 16th Street I valued at $300.

1139 Q. Well, you said that valuation was arrived at by fixing a figure for the bulkhead alone and then adding something to it?

A. Yes, in those two cases $50 per foot each.

Q. So that the total valuation given by you for this property, embracing all the situation, was $325 for 14th Street to 15th Street?

A. No, you have my testimony as $375.

Q. Then you added $50 to that?

A. $50 to $325.

Q. And for the 15th to 16th Street bulkhead you added how much?

A. $50.

Mr. MATHEWSON: $350 for that, being the total?

Q. Yes. Upon what did you base that valuation?

A. It was my opinion of the conjunctive value, which, in upland, I would call plottage. It is more or less a custom among brokers and varies with the individual.

Q. With the individual?

A. Yes.

Q. And that was your individual opinion, fixed arbitrarily, was it?
A. Entirely.
Q. And the value fixed was the result of that opinion?
A. The final value, yes.
Q. The next bulkhead property is on page 3, 18th Street. What did you allow at this point per lineal foot for the bulkhead property?
A. Alone?
Q. Yes.
A. For the value of the bulkhead property alone, $600 per lineal front foot. In conjunction, $700.
Q. You added $100 for the conjunctivity?
A. Yes.
Q. Upon what did you base that valuation? Did you fix that in the same way you did the other?
A. Not quite so much in this place. I tried to find out what others thought, and I considered their opinions somewhat in fixing my value there.

1140 Q. So that your conclusion or valuation here is largely the result of opinions of others than your own?
A. Not largely. I considered it.
Q. How much did it enter into your final conclusion?
A. Perhaps half, 50 per cent.
Q. So that valuation was made up, 50 per cent. of your own opinion and 50 per cent. of the opinion of others?
A. No, 50 per cent. of my opinion and 50 per cent. of what I thought the other people knew.
Q. In judging of the value of their opinion?
A. Yes, exactly.
Q. But you received their opinion to that extent?
A. I did.
Q. Are you aware of any actual transactions in that neighborhood of the purchase or sale of bulkhead property?
A. I have some records. I have not anything where the upland, I believe, and the bulkheads were sold at the same time. I have various sales or agreements to sell which run from Bank Street up to 15th Street.
Q. So that your only knowledge would be derived from the considerations paid in those transactions?
A. In giving this value?
Q. In giving this value.
A. Largely, yes, Mr. Burr, in that case.
Q. The other bulkhead is 113th Street, is it not?
A. No, on the East River, 111th Street. That is page 10.
Q. What are the dimensions of that bulkhead property?
A. It runs from the north side of 110th Street to the south side of 111th Street; at 111th Street the bulkhead line appears to be 70 feet east of the exterior line of Pleasant Avenue, and at 110th Street it appears to be 20 feet east of the exterior line of Pleasant Avenue.

1141 By Mr. MATHEWSON:

Q. I find it marked 73 feet 2 inches?

A. There is some question about that; the best figures I can get show 70.

Q. 70 feet, more or less.

A. Yes.

By Mr. BURR:

Q. What is the physical condition of that property? Does the bulkhead run out to the line?

A. The bulkhead runs out to the bulkhead line at the center of the block, and is platformed for ten feet in excess.

Q. How much did you allow there per lineal foot?

A. I allowed for the bulkhead rights $250.

Q. Upon what did you base that valuation?

A. I examined the neighborhood. I know of a sale—although some time ago—and I considered the opening of the park there, which took away a large amount of water front, the improvement by the city at 107th Street, and general activity in that section.

Q. Did you take the opinion of individuals?

A. I have talked with others about it.

Q. Did you take their opinions, knowing their experience of their business, as a factor in arriving at your conclusion?

A. I took it into consideration, but I found that the figure that I gave was my own prior to consulting with others.

Q. Did you place a value besides upon the land under water?

A. I figured the land under water out to the bulkhead line; it is a very small amount, only 9,000 square feet. I place a value there of $2 per square foot.

Q. Upon what basis did you arrive at that conclusion?

A. Partly in comparison with other places in the city, and partly by reason of the taking by the city of property in that neighborhood.

1142 Q. You based it then upon an actual transaction?

A. Partly, yes.

Q. What was the actual transaction?

A. It was at the foot of 114th Street. The city took 1,617 square feet in 1894, and they paid approximately $1 per square foot. I figured that that was thirteen years ago, and that various things had happened to largely increase the value of the same land.

Q. And in fixing your valuation of the bulkhead property, did you base that upon any actual transaction?

A. I considered a lease, or rather I found a lease which the city made of 187 feet of bulkhead property between 109th and 110th Streets; they leased it for two years at $1,800 a year.

Q. What year did they lease it?

A. 1905, and according to the rental which they get I figured that they valued the bulkhead at $250 a front foot.

Q. What was the rental?

A. $1,800 a year for two years, for 187 feet, which at 4 per cent. would be a total value of $45,000 for the bulkhead.

Q. Was that the only knowledge you had of transactions in that neighborhood with regard to land under water and bulkhead property?

A. That is true.

Q. And that taken in conjunction with your conversation with others and your own opinion, was the manner in which you arrived at the conclusion or fixing of this valuation?

A. Largely, in comparing it with water front property in other localities.

Q. How far away from that property was the other water front property?

A. I mean, comparing it in my mind with other water front properties of the city; what I could see was going on there?

Q. Are you familiar with the valuations of water front property all through the city?

A. No, I did not say that; I compared the activity and the general location of this property with the other properties in the city.

Q. Was that all the land under water and the bulkhead
1143 property at that point?

A. I understand so, yes.

Q. Where is the other bulkhead property?

A. Page 6; there are two bulkheads there, I think you will find.

Q. What is the extent of the bulkhead property there?

A. In front of each block 200 feet. I have taken it separately because the blocks are separate.

Q. What valuation have you given that property per lineal foot?

A. I have put a value of $600 per lineal foot on that.

Q. And upon what basis did you arrive at that valuation?

A. Roughly, my value per lineal foot of bulkhead alone is $525; I add $75 by reason of ownership of the upland, and I made a further addition by combining the upland with the bulkhead in one parcel because they are in one parcel. The Gas Company owns right through from 11th to 13th Avenues, and they operate it together, and I added a plottage value of 12 per cent., not to the bulkhead alone, but to all the land together.

Q. There is a street running through that property, isn't there?

A. There is a street indicated; it is not there.

Q. Did you eliminate that street from your consideration?

A. I included that in the property owned by the Gas Company.

Q. You included the dimensions of the street?

A. Yes.

Q. And in placing a value on that property you valued the land embraced in the street.

A. I valued the upland right out to the bulkhead from the easterly beginning of it.

Q. And you did that in all the other cases where a street runs through?

A. There is no street there.

Q. I mean, where the street was mapped out through the property?

A. It is not mapped out.

1144 Q. How does it appear there?

A. It does not appear; it is enclosed by a fence, and is used and occupied by the Gas Company.

Q. Have you any knowledge of any actual transactions in that neighborhood upon which you base your opinion?
A. Of the bulkheads?
Q. Yes.
A. The nearest one I think is 51st Street. No, there is one a little nearer than that. There was a sale from 51st to 52d Streets; I have not got the exact record of the date, but that property was taken by the city at $500 a lineal foot, I believe without any extras, interest or anything else.
Q. You never bought or sold any bulkhead property there yourself?
A. No, I am wrong there. I have a record of $475 a running foot at 51st and 52d Streets, but I do not consider that as valuable as the other.

By Mr. MATHEWSON:

Q. As valuable as the 44th and 46th Street property?
A. Not as valuable, no.

By Mr. BURR:

Q. Where was the other bulkhead property?
A. There is one fronting on the north block, the same case, page 6.
Q. Between 45th and 46th Streets?
A. Yes, my value there is the same.
Q. And upon what particular experience did you base your valuation upon that bulkhead?
A. No more than the other.
Q. Just the same as the other.
A. Yes.
Q. Did you consult with others in regard to that valuation?
A. I consulted with one other.
Q. I presume you consulted these gentlemen because you thought they had as much experience as you, if not more?
A. I am always glad to consult people whom I think it
1145 would be of advantage to consult and get their opinions, on upland as well as any other property.

Mr. GANS: That would be hardly called an answer to the question. Cannot you answer the question directly?
(The question is repeated by the stenographer.)
The WITNESS: As much.

Q. But no more. Where is the other bulkhead property?
A. 41st and 43d Street, page 5.
Q. What are the dimensions of that bulkhead property?
A. The length is 197½ feet.
Q. From what point?
A. From the northerly side of West 41st Street to the southerly side of West 42d Street. I believe that map which you have before you is not quite correct; the city maps show 197½ feet. I doubt if this one does. I have a city map here, if you wish it.

Q. On this map there appears to be a right of way, crossing over this property?
A. Yes.
Q. Do you know what that is?
A. Yes.
Q. What is it?
A. It is a right of way to the Albany Day Line pier at 41st Street.
Q. What is the extent of the right of way?
A. Two years yet to run, I believe.
Q. Over all the property?
A. Over a strip about 15 feet wide, enough to let two wagons pass.
Q. What valuation did you place upon that property per lineal foot?
A. $550.

By Mr. MATHEWSON:

Q. For the bulkhead?
A. Yes.

By Mr. BURR:

Q. Upon what basis did you fix that valuation?
1146 A. Partly for the reasons I have given you before and partly because I know of an offer which was made to the Gas Company by the City for this property.

By Mr. MATHEWSON:

Q. Do you mean the City of New York?
A. Yes.

By Mr. PAGE:

Q. Made through you?
A. No.

By Mr. BURR:

Q. Do you know that the offer was actually made, or have you heard it from somebody else?
A. I have heard it from both sides; that is, from an individual who knows that it was made, connected with the city, and also from an officer of the Gas Company, who was one of those to consider it.
Q. Have you had any actual transactions in that neighborhood, bulkhead property?
A. No.
Q. Do you know of any upon which you base that opinion?
A. I have a record here somewhere of an agreement reached between the City of New York and the owners of a bulkhead between 42d and 43d Streets.
Q. I am speaking of an actual transaction. Do you know whether that agreement was carried into effect?

A. I do not know; the agreement was made. I do not know that it was carried into effect.

Mr. MATHEWSON: Don't you call that an actual transaction, if the agreement was made, whether one side or the other broke it?

Mr. BURR: That may have been a tentative agreement too.

Mr. MATHEWSON: Possibly.

Q. At all events, it was not carried into actual payment,
1147 was it?

A. I do not know that it was not.

Q. And you do not know that it was?

A. I do not.

Q. You allowed for land under water at this point, $89,723. Upon what basis did you arrive at that valuation?

A. Upon the basis of an award made by the city at 51st and 52nd streets, an appeal from which has been taken by the owners of the property.

Q. Did you ever appear as an expert at valuing bulkhead property before?

A. I do not think so; no. I have not.

Q. You valued the bulkhead property at this point at $118,500?

A. Yes.

Q. And you have just stated the value per lineal foot, haven't you?

A. I put that at $550.

Q. That is, you allowed so much for the bulkhead property alone?

A. I allowed $550 for the bulkhead property alone, and I allowed only $50 in conjunction with the upland, because of that short right of way across there. I should have added $75 if it had not been for that.

Q. Do you know what the company receives for that right of way?

A. I do not.

Q. What value did you fix upon the right of way that entered into your final conclusion as to the value of the bulkhead property?

A. I thought that it was worth about $25 a running foot, partly because it might be difficult for the gas company to dispose of that bulkhead in the next two years to as great advantage as it might if that right of way were not there; but I also figured that the gas company got practically the whole use out of that pier, because it transported its coal—the only purpose for which it uses the pier—by an overhead trolley, and the right of way did not interfere in the least with its operation.

Q. Can you give the exact dimensions of the right of
1148 way?

A. No, I could not give them, but I think it is 16 feet, more or less; it runs diagonally across the pier. I do not know the distance; it is a little greater than the width of the pier, because it is diagonal.

Q. 44th and 45th Streets?

A. That we have finished; that ends the water front, I think.

Q. For all the land under water you have allowed the same rate, $1.10 a square foot?

A. I have averaged it at that; you mean at 42nd Street?

Q. I mean at all the different points.

A. No, I have allowed different amounts.

By Mr. MATHEWSON:

Q. What is the $1.10 average?

A. 41st to 42nd Streets, and 44th to 46th Streets. Land under water nearest to the bulkhead is worth more than land under water farther out, and in these particular places I averaged it at $1.10.

Q. What other land under water did you value that we have not touched now?

A. Land under water between the present bulkhead at 14th to 16th Street and the present bulkhead line.

Q. What is the extent of that?

A. The extent of that land under water is 31,500 feet.

Q. In these valuations of the bulkhead property, did you assume in every case that the Consolidated Gas Company is the owner of the property?

A. Yes.

Q. And you placed a value upon the land under water because of its nearness to the bulkhead, because it adjoins the bulkhead?

A. Depending upon its nearness to the bulkhead.

Q. How long were you engaged in making such examination?

A. Of the bulkheads?

Q. Yes.

A. That would be pretty hard to say.

Q. How long were you engaged in making an examination of all the property?

A. Between six and seven weeks.

1149 Q. Did you visit each one of the parcels?

A. Yes, each one.

Q. Did you go through them?

A. I did not go through the blocks which were taken up with holders, but I did go through the rest. I looked over the fence.

By Mr. MATHEWSON:

Q. Where the holders were?

A. Where the holders were.

By Mr. BURR:

Q. Did you make a personal inspection to ascertain what buildings were being actually used for gas purposes?

A. Not particularly, no.

Q. Were you accompanied by anyone representing the company when you were making this examination?

A. At most of the plants I either went with the foreman or superintendent or some official connected with the plant.

Q. And they told you what use the different buildings were put to?

A. I did not ask that; I asked for the buildings which were not used by the company; in other words, the various buildings from which they were getting rents.

Q. And they pointed out the buildings which as they said were not being used by the company?

A. Yes; I might also say that that corresponded with a list of the buildings, furnished by the central office, which I was asked to value.

Q. The dimensions which you have given—did you take those dimensions from some other source, or did you ascertain their correctness yourself by survey?

A. As to the various plots?

Q. Yes.

A. I compared the dimensions given on Exhibit No. 48 with the tax maps, the city maps, and I found them correct to with-
1150 in one or two inches in almost every case.

By Mr. MATHEWSON:

Q. That is, you found that they corresponded?

A. I found that they corresponded except in a very few cases, and there they were only out an inch or two.

By Mr. BURR:

Q. When did you make your report to the company on this property?

A. I have never made any report on it to the company.

Q. To whom did you make known the result of this examination of the property?

A. To Mr. Mathewson, about three days ago.

Q. So that you were not able to report until three days ago.

A. I did not report until three days ago.

Q. And did you work continuously at this work for nearly seven weeks?

A. Excepting two Saturdays and every Sunday.

Q. And with the exception of those days, you were actually engaged in inspecting the property for the purpose of valuation, all the rest of the time?

A. I say inspecting it or working on the figures in the office.

Q. I mean, engaged in this work?

A. Yes, actually.

Q. Did you receive any figures indicating the valuation of the property from the company, or from any person acting for the company?

A. I did not; I may say that our figures here are at your disposal; they would have been the same for you as they are for the company.

Mr. BURR: That is all I want to ask Mr. Wheelock.

1151 The MASTER: Any further questions?

Mr. PAGE: I just want to ask one question.

By Mr. PAGE:

Q. On page 6 of Exhibit 48 you will notice that the street adjoining the bulkhead property is not colored on that exhibit. As I understand it, you valued the land that is shown as plain, not colored, on that exhibit as a part of this property?

A. I did.

Q. And if that land does not belong to the Gas Company that should be deducted?

A. Certainly.

Q. And you have given, have you, the rate, so that that would be a mere matter of computation?

A. I have given a rate or value per lot on each of those streets. If for any reason the bulkheads were separated from the upland the values would be diminished slightly.

Q. By 12 per cent.?

A. Approximately, I say 12 per cent., yes.

Q. I think that is what you have stated in each instance was the value of the conjunction of the property, if that is what you called it?

A. Yes, each plot would therefore suffer.

Q. It would suffer by that 12 per cent. and also the land in the street?

A. Yes, sir.

By Mr. GANS:

Q. When you reported to Mr. Mathewson did you report the details as you have reported to us?

A. I merely gave him a map, which I think he has there with my total valuation of each plot on it.

Q. Did you give him at all the basis on which you made the valuation?

A. Never, and he did not know until he came here, as far as I know.

Mr. MATHEWSON: I did not know until I heard you testify to-day, if that is of any value.

1152 Mr. BURR: I move to strike out Mr. Wheelock's testimony as to bulkhead values and values of land under water, on the ground that it appears from his testimony that he is not qualified to testify as an expert on the values of such property.

The MASTER: The motion is denied.

Exception taken by Mr. Burr.

Mr. GANS: We join in the motion and we take the same exception.

Mr. BURR: I would like to understand, for the record, whether this property, the real estate testified to by Mr. Wheelock, embraces all the real estate of the Consolidated Gas Company?

Mr. MATHEWSON: It embraces all that we have claimed for, except so far as the Astoria Company.

Mr. BURR: I mean in the Borough of Manhattan.

Mr. MATHEWSON: Yes, and I am not personally aware of any

other. If there is any other I shall certainly put in evidence respecting it.

Redirect examination by Mr. MATHEWSON:

Q. Referring to the property shown on page 1 of Exhibit No. 48, at the southeast corner of Irving Place and 15th Street, are not the buildings on that property used as the general offices of the Consolidated Gas Company?

A. The entire building on the corner is used as general offices, and everything above the first floor of the other two buildings, I believe.

Q. As offices?

A. Yes.

Q. It is all used by the company?

A. As offices?

Q. No, not as offices necessarily, as testing stations, &c.?

1153 A. You asked "as offices." The other two floors are used for gas ranges and such things.

Q. If you will look at page 4 of Exhibit 48, you testified that 333 Avenue A was a tenement on the block between 21st and 22nd Streets, being block No. 952?

A. No. 952?

Q. 953, I think it is after all.

A. It is not on that page.

Q. Page 4?

A. Yes, that is right.

Q. All the rest of that land is used for the purposes of the company in connection with its gas business?

A. I believe so.

Q. And is it not true generally that these tenements to which you have referred are very slight fractions of very large plots, the balance of which is used for the gas business of the company?

Mr. GANS: I object to that.

Mr. MATHEWSON: As far as his observation is concerned.

Mr. GANS: I object to that. I do not think he is qualified to testify that the property is used for the gas business of the company.

Mr. MATHEWSON: He has been asked by you and by Mr. Burr constantly on that matter.

Mr. GANS: He has not been asked by us, and I do not think I remember any question Mr. Burr has asked on that line.

Mr. BURR: No.

The MASTER: He may answer it.

Mr. GANS: Let me have my objection noted. I object to the question on the ground that it calls for an expert opinion on the part of a witness who is not an expert in gasmaking.

Exception t[illegible]n by Mr. Gans.

Q. (Continuing:) Of your own personal observation.

A. A very small fraction.

1154 Q. You say you valued these buildings which you did value upon what you think they would bring in case of sale.

Would that be more or less than the original cost of construction, do you know?

A. Considerably less than the original cost.

Mr. PAGE: I suppose by original cost you mean cost to build?

A. Originally?

Q. Yes, originally.

A. A very much smaller proportion than the present.

By Mr. MATHEWSON:

Q. Has the firm with which you are now connected, and the previous concerns with which you have been connected, sold property over all sections of the city?

A. Yes.

Q. In addition to the sales that have been made by you or by your office, have you access to the general statistics and records, etc., which real estate offices keep?

Mr. GANS: What real estate offices keep—his real estate office?

Mr. MATHEWSON: Which your real estate office keeps.

A. Oh, yes, certainly.

Q. Have you made a study of those statistics in addition to your own sales in your own office?

A. I think I know every sale made in the office for the last five years.

Q. Have you made use of that information in making up your amount as to the values, these appraisals to which you have testified?

A. Considerably.

Q. Will you look at the plot on the south side of 60th
1155 Street, page 7 of Exhibit 48, and say what part of that plot or those plots you consider to be depreciated on account of the new bridge.

A. Since the plot is an entire one, the whole plot in case of a sale would feel the depreciation due to the construction of the new bridge, but principally the southerly half of the block, facing on 60th Street.

Q. And you mean that the depreciation might reach the percentage that you have stated, averaged over the whole plot?

A. It was my offhand opinion that the southerly half had been depreciated approximately 10 per cent. I do not think—I feel sure in fact, that that percentage would not hold over the whole plot; it would be somewhat less.

Q. I want to ask whether the corporation of Douglas Robinson, Charles S. Brown & Co., and the preceding firm, Douglas Robinson, Charles S. Brown, have a large or extensive business or not in buying and selling real estate in the city of New York?

A. It is our principal business.

Q. And has it been for some years past?

A. Yes.

Q. Have you included in the buildings which you have valued any part of the manufacturing plants of the company, or the holders?

A. No.

Q. You say that the total value of the land, according to your estimate, on the island of Manhattan, is $15,651,500.

A. May I make a statement here? No. I found yesterday in completing my survey of the general property that in my figures here there was a clerical error, which made a slight difference in the total. I have made a note of it on the record, and my total after the corrections is $15,951,500, including the Shady Side property.

Q. And excluding the Shady Side property; that is, including only property in the island of Manhattan?

A. $15,651,500.

Q. That is the same correction made by you yesterday at page 1,113 of the record?

A. That is right.

1156 Q. That I think you stated was what you would consider the property could be sold for?

A. Yes.

Q. I want to ask you whether in your judgment it would be possible to acquire plots of size, similarly situated to these which you have testified to, for the same sum of $15,651,500.

Mr. BURR: I object to that as incompetent, purely speculative and calling for a conclusion.

Mr. GANS: We join in that objection.

The MASTER: He may answer.

Exceptions taken by Mr. Gans and Mr. Burr.

A. No, I do not think they could.

Q. Do you base your opinion upon any experience of your own and your general knowledge of conditions in New York?

A. Yes.

Q. Any particular one?

A. Buying for the Pennsylvania Railroad.

Q. The locations of their terminals?

A. 31st to 33rd Streets, Seventh to Ninth Avenues, and large additional plots in the vicinity.

Q. And this additional value which large plots have by reason of their being large and contiguous lots is what you call plottage?

A. Yes.

Q. Will you now look at the 46th Street property, page 6 of Exhibit 48. Would not a certain per cent. beyond the value of the avenue and street lots in Block No. 1092, for example, be added by reason of the aggregation of those lots, even if the line of Twelfth Avenue were cut through?

A. There would be added something for plottage, yes.

Q. Ought not the entire 10 per cent. to which you have referred be taken——

Mr. PAGE: No, 10 per cent. is for the continuity.

The WITNESS: I think you misunderstood me.

1157 Mr. PAGE: No, you said it consisted in the fact that it abutted, not that it was contiguous.

A. I should add to that upland 10 per cent., as I have in other cases of the same sized plots.

Q. And the difference between that and the 12 per cent. reckoned

on the entire valuation would be the addition by reason of the loss in plottage, if the street were put through?

A. Yes.

Q. You would in that case—would you not—have lots facing on Twelfth Avenue as well as on 44th and 45th Street?

A. Yes, sir.

Q. Would not that be a certain value to offset cutting off of the dock?

A. Something.

Q. And the same is true as to the block, 45th to 46th Street?

A. Yes.

Q. So that it would require some other computation than a mere *pro rata* computation to determine the value of the company's property, even if the streets were cut through?

A. Yes.

Q. Could you state or could you compute in a moment, or could you not, what would be the value of the company's property still remaining provided Twelfth Avenue were taken out and the plot left as it then is, in lieu of the values you have already stated for Blocks 1092 and 1093, and the bulkhead?

Mr. BURR: I object to that as incompetent and purely speculative, and calling for a conclusion.

Mr. GANS: We join in the objection.

The MASTER: I will allow it.

Exceptions taken by Mr. Gans and Mr. Burr.

A. I might be able to value that.

Q. If you haven't the data at hand I won't ask you to state offhand.

A. Well, I could not even secure that data, for this reason,
1158 that if that avenue were opened and the avenue was closed again at 43d Street as it is at present it would make one value. If Twelfth Avenue were opened and it was opened at the same time from 42d Street to 43d Street, it would make another value.

Q. So your valuation is upon the basis of the property as you found it to-day used by the Gas Company?

A. Yes.

Q. Referring to page 2 of Exhibit 48, bulkhead property and property on water east of Tompkins Street, why do you establish a higher rate per lineal foot for the bulkhead property between 14th and 15th Streets than you place upon that between 15th and 16th Streets?

A. On account of the increased value of the streets running down to the water front at 14th Street.

Q. Fourteenth Street is a broader street and more of a business street than 15th Street, is it not?

A. Yes, there is a large sand business down there, unloading sand at the bulkheads.

Q. Do you remember whether Tompkins Street is closed above 16th Street and below 14th Street?

A. It is.

Q. So as a matter of fact the Consolidated Gas Company as owners of the upland have an unusual use of the bulkhead property or means of access to it, have they not?

A. Very unusual.

Q. Without interruption from any general traffic passing up or down Tompkins Street, except their own?

A. That is true.

Q. Now, you have been asked some questions as to whether figures were given you in advance for these valuations. Were you asked to do anything except merely to examine and give your best judgment of the values of these properties?

A. I think those are the exact words that Mr. Gawtry used in speaking to me.

Q. And of course in applying the data which you have
1159 discovered in the sales which you have made and sales which you know of, and the other information which you have obtained, you have employed your own best judgment in applying them to individual parcels in valuing?

A. I have.

Mr. MATHEWSON: I have no more questions.

By Mr. GANS:

Q. I presume you are to be remunerated for the time spent in making these computations, viewing these properties and giving your opinion here?

A. I trust so. I have not arranged for any fee.

By Mr. BURR:

Q. Do you mean to say you are testifying before you fixed your fee?

A. Certainly.

Mr. MATHEWSON: I desire now, if the Master please, to put in evidence the special franchises of the company upon which I began once before. I present and offer in evidence original grant from the City of New York to New York Gas Light Company included in the articles of agreement, indented, made and concluded the 12th day of May, 1823, by the Mayor, Aldermen and Commonalty of the City of New York, party of the first part, and New York Gas Light Company, party of the second part.

Mr. GANS: Objected to as immaterial, irrelevant and incompetent; on the ground that there is no proof that the persons purporting to sign the same on behalf of the City of New York were authorized by law to bind the City of New York. By that I do not mean that we question the official character of the persons who signed or pur-
ported to sign, or that the signature appended to these in-
1160 struments was their signature. I object further on the ground that there is no proof that these instruments convey any property to which the complainant corporation has ever acquired any title or in which the complainant corporation has ever acquired any interest.

Mr. BURR: I object to it on the part of the City on the ground that the franchise claimed is no longer in existence, and on the ground that there is no proof offered that the terms and conditions under which it was granted have been complied with.

Mr. GANS: I also join in the City's objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 101.

Mr. BURR: I want to add to my objection further, that it can only be offered in evidence here for the purpose of placing some value on it, I presume, and that according to our contention no valuation can be placed upon that franchise which would affect the price of the manufacture and distribution of gas to the consumers in the City of New York.

Mr. GANS: We shall raise the same point, but do not think it is necessary to put the objection to its admission on that ground.

Mr. MATHEWSON: This Exhibit No. 101 is found in print at page 736 and following in Volume 2 of the Appeal Record from the Gas Commission's finding, to which reference has been previously made.

I now offer in evidence indenture dated 5th day of May, 1848, being the grant from the Mayor, Aldermen and Commonalty of the City of New York, of the first part, to the Manhattan Gas
1161 Light Company, of the second part, having reference among other things to the use of the streets of the city for the fixtures of the party of the second part.

Mr. GANS: We make the same objection that we have made on our part before and that we made in joining in the city's objection to this instrument.

Mr. BURR: I make the same objection to this paper, purporting to be a franchise, that I made to the prior one.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 102.

Mr. MATHEWSON: This document Complainant's Exhibit 102 is found in print in Volume 3 of the printed record on appeal from the order of the Gas Commission, at page 2,017 and following.

I also offer in evidence a prior instrument, being indenture made the 8th day of May, 1833, between the Mayor, Aldermen and Commonalty of the City of New York of the first part and the Manhattan Gas Light Company of the second part, covering among other things the rights of the Manhattan Gas Light Company to place their fixtures in the public streets.

Mr. GANS: We make the same objection to this as we have made to the previous instruments of this character.

Mr. BURR: Same objection as I made before. On the ground, further, that that franchise has expired and that there is no evidence that the ordinances of the City of New York have been complied with, or that any action taken by said company was under the direction and authority of the City of New York.

The MASTER: Same ruling.

1162 Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 103.

Mr. GANS: I thought we had included in our original objection that the franchise had not expired. If we did not I want to have it included in my objection to all these instruments.

The MASTER: Yes, that objection was made.

Objection overruled.

Mr. GANS: Exception.

Mr. MATHEWSON: I offer in evidence certified copy of the resolution of the Mayor, Aldermen and Commonalty of the City of New York, purporting to give the Harlem Gas Light Company authority to lay conductors in the streets, etc., of the City of New York, adopted March 26th, 1865; also another certified copy of resolution of same purport, adopted April 25, 1855, in favor of the same company; in each case by the Board of Aldermen of the City of New York. This instrument includes, of course, the approval of the Mayor.

Mr. BURR: Same objection.

Mr. GANS: We make the same objection as to the previous instrument.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 104.

Mr. MATHEWSON: The printed copy of this Exhibit No. 104 is found in Volume 3 of the Papers on Appeal from the order of the Gas Commission, at page 2,023 and following.

I offer in evidence certified copy of resolution of the Common Council of the City of New York, adopted June 9, 1858, by the Council and by the Board of Aldermen on June 10, 1858,

1163 and passed over the Mayor's veto by the Council on the 21st day of December, 1858, and by the Board of Aldermen on December 22, 1858; purporting to grant to the Metropolitan Gas Light Company of the City of New York authority to lay its pipes, etc., in the public streets.

Mr. GANS: The same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 105.

Mr. MATHEWSON: This Exhibit No. 105 will be found in print in the Record on Appeal from the Gas Commission's order, at page 2025 and following.

I also offer in evidence certified copy of a resolution passed by the Common Council June 18, 1863, and by the Board of Aldermen on June 22, 1863, and passed by the Board of Councilmen over the Mayor's objections August 3, 1863, and by the Board of Aldermen on September 17, 1863, purporting to grant to the Anthracite Gas Lighting and Heating Company of New York the right to lay pipes in the public streets; and also a certified copy of a further resolution

passed by the Board of Councilmen May 18, 1865, and the Board of Aldermen May 24, 1865, relating to the same subject.

Mr. GANS: We make the same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Mr. MATHEWSON: Those resolutions are found in the printed appeal book from the Gas Commission's order, at page 2,026 and following.

Received in evidence and marked Complainant's Exhibit 106.

Mr. MATHEWSON: I offer in evidence certified copy of the
1164 certificate of incorporation of the Anthracite Gas Lighting and Heating Company, dated May 27, 1863.

Mr. GANS: Objected to as incompetent, immaterial and irrelevant.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 107.

Mr. MATHEWSON: I also offer in evidence certified copy of certificate of incorporation of The Citizens Mutual Gas Light Company of New York, dated May 26, 1865.

Mr. GANS: The same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 108.

Mr. MATHEWSON: I also offer in evidence original indenture dated May 27, 1865, between the Anthracite Gas Lighting and Heating Company of New York, of the first part, and The Citizens' Mutual Gas Light Company of the City of New York, of the second part, transferring to the latter the rights granted to the former by the City of New York by the previous resolutions introduced in evidence.

Mr. GANS: Objected to as incompetent, irrelevant and immaterial, as not tending to prove anything within the issues in this case, as not tending to establish the existence of any rights in the complainant in this case and, further, on the ground that there was no power to transfer any of the rights purporting to be transferred by the instrument in question.

1165 Mr. BURR: Same objection, and in addition I make the same objection as I made before.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 109.

Mr. MATHEWSON: I also offer in evidence certified copy of certificate of incorporation of The Union Gas Light Company, dated October 26, 1871.

Mr. GANS: Objected to as incompetent, irrelevant and immaterial.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 110.

Mr. MATHEWSON: I also offer in evidence original indenture dated the 22nd day of November, 1871, from The Citizens' Mutual Gas Light Company of the City of New York to the Union Gas Light Company of the City of New York, conveying the rights acquired by the former from the City of New York by resolutions already in evidence.

Mr. GANS: Same objection to that as I made to Exhibit 109.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 111.

Mr. MATHEWSON: I also offer in evidence certified copy of an order of the Special Term of the Supreme Court made on the 15th day of June 1875, John R. Brady, Justice, in the matter of the People of the State of New York against the Union Gas Light Company of the City of New York, appointing Charles Edgar
1166 Appleby, receiver of the property, franchises and effects of the Union Gas Light Company.

Mr. GANS: Objected to as incompetent, immaterial and irrelevant.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 112.

Mr. MATHEWSON: I also offer in evidence certified copy of order in the same proceeding, made at a Special Term of the Supreme Court on the 24th day of July, 1876, T. R. Westbrook, Justice, directing a sale by said receiver of the Union Gas Light Company of the property, rights, franchises and contracts of that company.

Mr. GANS: Objected to as incompetent, irrelevant and immaterial, and as insufficient to establish that a Court of Jurisdiction, and having jurisdiction of the subject matter, had entered a decree, supposing it to be entered.

Mr. MATHEWSON: I judge the Federal Courts takes judicial notice of the general statutes of the State.

Mr. GANS: And there are other jurisdictional defects which may have to be established.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 113.

Mr. MATHEWSON: I also offer in evidence certified copy of an order of the Special Term of the Supreme Court of the State of New York, made the 11th day of March, 1879, by Abraham R. Lawrence, Justice, in the same proceeding, confirming the sale by the
1167 receiver mentioned of the property, assets, effects, franchises and rights belonging to the Union Gas Light Company to Walter Osborn, Tilton E. Doolittle and Jared E. Redfield, Receivers of the Johnson Savings Bank of New Haven, Connecticut, they being the highest bidders therefor, and reciting due notice of the sale and that the purchasers at such sale had duly assigned their purchase and bid to Clark Bell, and that the receiver had executed transfers

and conveyances of such property and assets to Clark Bell, and the order further ratifying and confirming the action of said receiver.

Mr. GANS: The same objection as to the previous exhibit.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Mr. BURR: Do you mind having the date appear that that was filed?

Mr. MATHEWSON: March 11, 1875, is the only date here.

Received in evidence and marked Complainant's Exhibit No. 114.

Mr. MATHEWSON: I also offer in evidence original indenture, dated the 10th day of August, 1876, between Charles Edgar Appleby, Receiver of the Union Gas Light Company, to Clark Bell, transferring to the latter the property, rights, and franchises of the Union Gas Light Company above referred to.

Mr. GANS: Same objection as was made to the admission of Exhibit No. 109.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

1168 Received in evidence and marked Complainant's Exhibit 115.

Mr. MATHEWSON: I also offer in evidence original indenture, dated August 22, 1876, between Clark Bell and the Knickerbocker Gas Light Company, by which the former transferred to the latter the property and franchises acquired by Clark Bell from the receiver of the Union Gas Light Company as aforesaid.

Mr. GANS: Same objections as was made to the admission of Exhibit 109.

Mr. BURR: The City joins in the objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 116.

Mr. MATHEWSON: I also offer in evidence resolution adopted by the Board of Aldermen of the City of New York, dated December 21, 1876, approved by the Mayor December 23, 1876, granting permission to all incorporated gas light companies to lay gas mains and pipes in the streets, etc., in the City of New York, for the purpose of supplying gas to the city and its inhabitants.

Mr. GANS: Objected to on the same grounds as set forth to Exhibits 101, 102 and 103.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit No. 117.

Mr. MATHEWSON: I also offer certified copy of a grant and agreement made by the City of New York, March 22d, 1877, signed by Smith Ely, Jr., Mayor, John Kelly, Comptroller, and Allan Campbell, Commissioner of Public Works, reciting the resolution, Exhibit 117, and prescribing conditions upon which the Munici-

1169 pal Gas Light Company may place fixtures in the streets of the City of New York, under the terms of said resolution,

Exhibit 117, and the assent of the Municipal Gas Light Company and acceptance of said conditions, dated March 22, 1877, executed by the Municipal Gas Light Company, Charles G. Francklyn, President, and Philip Allen, Secretary.

Mr. GANS: Same objection as to the last exhibit.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 118.

Mr. MATHEWSON: I also offer in evidence Chapter 944 of the Laws of the State of New York of 1871, being an act to authorize the construction of gas works, and the manufacture and sale of gas for the purpose of lighting a portion of the City of New York, and so forth.

Mr. GANS: Objected to as incompetent, immaterial and irrelevant, and as conferring no rights upon the complainant in this action.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Received in evidence as Complainant's Exhibit 119, but not marked.

Mr. MATHEWSON: I also offer in evidence affidavit of publication under Section 3 of said Chapter 944 of the Laws of 1871, dated the 20th day of May, 1878, by William Foster, Jr.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

1170 Received in evidence and marked Complainant's Exhibit 120.

Mr. MATHEWSON: I also offer in evidence original assignment from William R. Dyer, one of the individuals mentioned in said Chapter 944 of the Laws of 1871, to William Caldwell, conveying rights of William Dyer conferred by said Chapter 944.

Mr. GANS: I am afraid we shall have to object to this as incompetent, irrelevant and immaterial and, also, on the ground, that there is no proof that William R. Dyer is the person mentioned in Chapter 944 of the Laws of 1871. My point is this, we may be able to afford to admit that certain public acts or certain public instruments purporting to be public acts are genuine, but I don't know that we would be doing our duty if we admitted the authenticity of a signature of this sort or the identity of the person.

Mr. BURR: I join in the objection.

Mr. MATHEWSON: I do not think you would be going very far aside from your duty if you did.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

Mr. MATHEWSON: This instrument recites that William R. Dyer is one of the persons mentioned in the first section of the act, Chapter 944 of the Laws of 1871; and the acknowledgment upon the instrument recites that he is the person described in and who executed the foregoing instrument, and he is described in the instrument as

one of the individuals mentioned in the act which has been put in evidence.

Mr. GANS: I do not think that that constitutes proper proof of identity for any such purpose as this, and therefore I object
1171 specifically on that ground as well as on the other grounds I have mentioned.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 121.

Mr. MATHEWSON: I also offer in evidence assignment from William Cauldwell as assignee of said William R. Dyer, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated December 29, 1871, transferring to the assignees the rights obtained by said Cauldwell from William R. Dyer by the last preceding exhibit.

Mr. PAGE: I think we had better add to the last objection that that was a grant to those people jointly and not jointly and severally, and Dyer would have no power under the act to assign.

Mr. MEADE: It says to them or their assigns, in the act.

Mr. PAGE: It says they shall within a certain time appoint an executive committee who——

Mr. MEADE: We have proved that by the second document we offered in evidence.

Mr. MATHEWSON: We will make proof of that.

Mr. GANS: We make the same objection to this last instrument that we made to the one immediately preceding it, including the objection suggested by Senator Page, that the grant was a grant, if valid at all, to certain persons collectively and confers no rights upon any individual which he could assign, and also on the further ground that the grant reads to the assigns of certain individuals and not to the assigns of their assigns forever.

Mr. BURR: Same objection.

1172 The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 122.

Mr. MATHEWSON: I also offer in evidence original assignment dated June 29, 1871, from William P. Smith, recited as being one of the persons mentioned in the first section of Chapter 944 of the Laws of 1871, to Isaac P. Martin, of all interest of said William P. Smith obtained under said act.

Mr. GANS: We object upon the same grounds as to the previous paper, including the authenticity of the instrument and the identity of the person purporting to have signed it.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit 123.

Mr. MATHEWSON: I also offer in evidence assignment dated November 27, 1871, from said Isaac P. Martin to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, transferring to the assignees all interests obtained by Isaac P. Martin under the assignment shown in the last previous exhibit. My offer includes the entire

paper, including the original power of attorney attached to the assignment proper.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 124.

Mr. MATHEWSON: I also offer in evidence original assignment from Edward Jones, recited to be one of the grantees named
1173 in the first section of the act aforesaid, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated November 25, 1871, transferring to the grantees all the interest of said Jones under said act.

Mr. GANS: Same objection.

Mr. BURR: Same objection

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 125.

Mr. MATHEWSON: I offer original assignment from Shepherd F. Knapp, recited to be one of the grantees named in Section 1 of the Act aforesaid, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated November 28, 1871, of all the grantor's interest under said act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 126.

Mr. MATHEWSON: Also original assignment from William H. Bloom, recited to be one of the grantees named in said Chapter 941 of the Laws of 1871, to Cornelius Corson, of all interest of the assignor acquired under said act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 127.

Mr. MATHEWSON: I also offer in evidence original assignment from Cornelius Corson to C. S. Bushnell, Henry J. Davison
1174 and Gordon H. Waddell, of all interest acquired by the grantor from William H. Bloom by the instrument last offered in evidence.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 128.

Mr. MATHEWSON: I also offer in evidence original assignment from Joel A. Fithian, recited to be one of the grantors named in said Act of 1871, to Richard B. Connolly, dated July 6, 1871, transferring the interest of said Fithian, acquired under said Act, to said Connolly.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 129.

Mr. MATHEWSON: I also offer in evidence original assignment from Richard B. Connolly to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest acquired by the grantor from Fithian under the conveyance last offered in evidence, this assignment being dated November 25, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 130.

Mr. MATHEWSON: I also offer in evidence original assignment of Walter Smith, recited to be one of the grantees named in the first section of the Act of 1871 aforesaid, dated November
1175 28, 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, assigning all the interest of the grantor to said grantees.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 131.

Mr. MATHEWSON: I also offer in evidence original assignment from Joseph Murphy, recited to be one of the grantees named in section 1 of said act of 1871, to Forbes Holland, dated July 13, 1871, transferring to said Holland all interest of said grantor under said act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 132.

Mr. MATHEWSON: I also offer in evidence original assignment from said Forbes Holland to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated November 25, 1871, conveying to the grantees all interest acquired by said Holland from Joseph Murphy under the last preceding assignment.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 133.

Mr. MATHEWSON: I also offer in evidence original assignment from Edward Taylor to William M. Tweed, Jr., dated July 3, 1871, reciting that said Taylor is one of the individuals named in
1176 Section 1 of said act of 1871 and transferring to the grantee all interest acquired by said Taylor under said act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 134.

Mr. MATHEWSON: I also offer in evidence original assignment dated November 27, 1871, from William M. Tweed, Jr., as assignee of Edward Taylor, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, transferring to the grantees all interest of said Tweed under the Act aforesaid.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 135.

Mr. MATHEWSON: I also offer in evidence original assignment from John E. Cronly, recited to be one of the grantees mentioned in said Chapter 944 of the laws of 1871 to Alexander Frear, dated July 18th, 1871, transferring to said assignee all interest of said Cronly acquired under said Act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 136.

Mr. MATHEWSON: I also offer in evidence original assignment from George H. Hicks, recited to be one of the grantees
1177 named in said Chapter 944 of the Laws of 1871, to Alexander Frear, of all interest of said grantor under said Act, the assignment being dated November 24th, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 137.

Mr. MATHEWSON: I offer in evidence original assignment from Alexander Frear to C. S. Bushnell, Henry J. Davison, and Gordon H. Waddell, dated November 24th, 1871, of all interest acquired

pursuant to said Act of 1871 by said grantor, as assignee of George H. Hicks and John E. Cronly.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 138.

Mr. MATHEWSON: I also offer in evidence original assignment from Joseph G. Jennings, referred to be one of the grantees named in said Act of 1871 dated June 29th, 1871, transferring to Charles Banks all of the interest of the grantor acquired under said Act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 139.

Mr. MATHEWSON: I also offer in evidence original assignment from Charles Banks as assignee of Joseph G. Jennings to
1178 C. S. Bushnell, Henry J. Davison, and Gordon H. Waddell, of all interest acquired by said Banks as said assignee of the said Act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 140.

Mr. MATHEWSON: I also offer in evidence original assignment from Henry Johnson, recited as one of the grantees mentioned in Chapter 944 of the Laws of 1871, to William Hitchman, dated November 24th, 1871, conveying to the assignee all the interest of the grantor of the said Act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 141.

Mr. MATHEWSON: I offer in evidence original assignment from William Hitchman as assignee of Henry Johnson to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated November 25th, 1871, of all the interest acquired by the grantor by virtue of said assignment under said Act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 142.

Mr. MATHEWSON: I also offer in evidence assignment from Ed-

ward J. Shandley, recited to be one of the grantees named in
1179 the first section of said Act of 1871, transferring to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, all the grantor's interests under the said Act of 1871, being dated December 4th, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 143.

Mr. MATHEWSON: I offer in evidence original assignment from John C. Angell recited as one of the grantees named in said Act of 1871 to James M. Sweeney of all the interests of the grantor acquired under said Act, said assignment being dated June 21st, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit 144.

Mr. MATHEWSON: I also offer in evidence original assignment from James M. Sweeney as assignee of John C. Angell to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all his interests acquired by said assignment under Chapter 944 of the Acts of 1871, said assignment being dated December 26th, 1871, also the power of attorney attached.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 145.

1180 Mr. MATHEWSON: I also offer in evidence original assignment from William Vail, recited to be one of the grantees in said act of 1871, to Thomas C. Fields, of all the interests of the grantor, acquired under said act, said assignment being dated June 14th, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 146.

Mr. MATHEWSON: I also offer in evidence original assignment from Patrick Quinn, recited to be one of the grantees named in said act of 1871, to Thomas C. Fields, of all the interests of the grantor under said act, said assignment being dated June 14, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

The paper was received and marked Complainant's Exhibit No. 147.

Mr. MATHEWSON: I also offer in evidence original assignment from William H. Murphy, recited to be one of the grantees under said act of 1871, to Thomas C. Fields of all the interests of the grantor acquired under said act of 1871, assignment being dated June 14, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 148.

Mr. MATHEWSON: I also offer in evidence original assignment from William Higgins, recited to be one of the grantees in said act of 1871, to Thomas C. Fields of all interests of the grantor
1181 acquired under said act of 1871, said assignment being dated June 26, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 149.

Mr. MATHEWSON: I also offer in evidence original assignment from John H. Johnston, recited to be one of the grantees mentioned in the first section of the said act of 1871, to Thomas C. Fields of all the grantor's interests under said act, said instrument being dated June 14th, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 150.

Mr. MATHEWSON: I also offer in evidence original assignment from George Chivvis, recited to be one of the persons mentioned in the first section of the said act of 1871, to Thomas C. Fields, transferring to the latter all the interest of the grantor under said act, said assignment being dated July 6, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 151.

Mr. MATHEWSON: I also offer in evidence original assignment from Thomas C. Fields, as assignee of John H. Johnston, Patrick Quinn, George Chivvis, William Higgins, William H. Mur-
1182 phy, and William Vail, to C. S. Bushnell, Henry J. Davison, and Gordon H. Waddell, of all the interest acquired by said Fields, under said Act of 1871, pursuant to the previous assignment, this instrument being dated November 25th, 1871.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 152.

Mr. MATHEWSON: I also offer in evidence original assignment from Richard H. Vaughan, dated July 3rd, 1871, to George L. Loutrel, of all the interest of the grantor under said Act of 1871, said Vaughan being recited to be one of the individuals named in the said Act.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 153.

Mr. MATHEWSON: I also offer in evidence original assignment from George L. Loutrel, as assignee of Richard H. Vaughan, to C. S. Bushnell, Henry J. Davison, and Gordon H. Waddell, of all interest acquired by the grantor under said Act of 1871, said assignment being dated November 25th, 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 154.

1183 Mr. MATHEWSON: I also offer in evidence original assignment from Andrew J. Smith, recited to be one of the grantees named in the first section of the Act of 1871, to C. S. Bushnell, Henry J. Davison, and Gordon H. Waddell, of all interest of the assignor acquired under said Act, said assignment being dated November 25th, 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 155.

Mr. MATHEWSON: I also offer in evidence original assignment from Henry A. Smith, recited to be one of the grantees named in the first section of said Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all the interest of said grantor acquired under said Act, said assignment being dated December 5th, 1871, also the power of attorney thereto attached.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 156.

Mr. MATHEWSON: I also offer in evidence original assignment from Joseph Bell, recited to be one of the grantees named in the first section of said Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest of the grantor acquired under said Act of 1871, said assignment being dated November 25th, 1871.

Mr. GANS: Same objection.

1184 Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 157.

Mr. MATHEWSON: I also offer in evidence original assignment dated December 30th, 1871, from John J. Walsh, recited to be one of the grantees named in the first section of the said Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, transferring to the assignees all the interest of the *assignees all the interest of the* assignor acquired under the said Act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 158.

Mr. BURR: This power of attorney on Exhibit No. 156, does that purport to be an original or a copy.

Mr. MATHEWSON: It purports to be a sworn copy. I offer in evidence original assignment dated the — day — ——, 1871, and acknowledged November 27, 1871, from Delavan Peck, recited to be one of the grantees named in the first section of said Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, transferring to the grantees all the interest of the grantor acquired under said Act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 159.

1185 Mr. MATHEWSON: I also offer in evidence original as-ignment from Thomas Y. Avery, recited to be one of the grantees mentioned in the first section of said Act of 1871, to A. Oakey Hall, of all interest of said grantor acquired under said Act of 1871, said assignment being dated the 29th day of June, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 160.

Mr. MATHEWSON: I also offer in evidence original assignment from A. Oakey Hall, dated November 27, 1871, as assignee of Thomas Y. Avery, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all the interest acquired by the grantor by the last previous assignment under said Act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 161.

Mr. MATHEWSON: I also offer in evidence original assignment from John Balmore, recited to be one of the grantees named in the first section of said Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all the grantor's interest acquired under said Act of 1871, said assignment being dated November 27, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

1186 Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 162.

Mr. MATHEWSON: I also offer in evidence original assignment from James S. Turner, recited to be one of the individuals named in said act of 1871, to William M. Tweed, of all the interest of the grantor under said act, said assignment being dated July 3, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 163.

Mr. MATHEWSON: I also offer in evidence original assignment from William M. Tweed, as assignee of James S. Turner to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated November 27, 1871, of all the interest of the grantor acquired by the last previous conveyance under said act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 164.

Mr. MATHEWSON: I also offer in evidence original assignment from William Johnston, recited to be one of the individuals named in said act of 1871, to John Ryan, of all the interest acquired by said Johnston, the said grantor under said act, said assignment being dated December 16, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

1187 Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 165.

Mr. MATHEWSON: I also offer in evidence original assignment from John Ryan, as assignee of William Johnston to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, dated December 18, 1871, of all interest of the assignor acquired by such assignment under said act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 166.

Mr. MATHEWSON: I also offer in evidence original assignment from Henry S. Murray, recited to be one of the persons named in said act of 1871, to Peter B. Sweeny, of all interest of the grantor acquired under said act, said assignment being dated July 3, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 167.

Mr. MATHEWSON: I also offer in evidence original assignment from Peter B. Sweeny, as assignee of Henry S. Murray to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest of the grantor acquired by such assignment under said act of 1871, said assignment being dated December 4, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

1188 Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 168.

Mr. MATHEWSON: I also offer in evidence original assignment from Peter H. E. Baxter, recited to be one of the persons mentioned in said act of 1871, to Henry W. Genet, of all interest of the assignor acquired under said act, said assignment being dated June 16, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 169.

Mr. MATHEWSON: I also offer in evidence original assignment from Henry W. Genet, as assignee of Peter H. E. Baxter to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest acquired by such assignor under said act of 1871, such assignment being dated November 28, 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 170.

Mr. MATHEWSON: I also offer in evidence original assignment from John Cox, recited to be one of the grantees named in the first section of said act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest of the assignor acquired under said act, said assignment being dated November 25, 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
1189 Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit 171.

Mr. MATHEWSON: I also offer in evidence original assignment from John J. Turner, recited to be one of the persons named in said act of 1871, to William E. King, of all interest of the assignor acquired under said act, said assignment being dated July 3, 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 172.

Mr. MATHEWSON: I also offer in evidence original assignment from said William E. King, dated July 18, 1871, to James F. Pierce, of all rights acquired by said King under said act of 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 173.

Mr. MATHEWSON: I also offer in evidence original assignment from James F. Pierce as assignee of John J. Turner to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interest acquired by said assignor under said Act of 1871, said assignment being dated November 25, 1871.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
1190 The paper was received and marked Complainant's Exhibit No. 174.

Mr. MATHEWSON: I also offer in evidence original assignment from Edgar Brower, recited to be one of the individuals named in said Act of 1871 to Charles E. Wilbour of all interests of the grantor acquired by said grant, aforesaid, said assignment being dated July 3, 1871.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 175.

Mr. MATHEWSON: I also offer in evidence original assignment of Charles E. Wilbour as assignee of Edgar Brower to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interests acquired by the assignor under said Act of 1871, said assignment being dated November 27th, 1871.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit 176

Mr. MATHEWSON: I also offer in evidence original assignment of Charles E. Loew, recited to be one of the grantees named in said Act of 1871 to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interests of the assignor acquired under said Act, said assignment being dated November 25, 1871.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
1191 The paper was received and marked Complainant's Exhibit No. 177.

Mr. MATHEWSON: I also offer in evidence original assignment from Matthew T. Brennan, recited to be one of the grantees named in the first section of the Act of 1871, to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, of all interests of the grantor acquired under said Act, said assignment being dated November 25th, 1871.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 178.

Mr. MATHEWSON: I also offer in evidence original resignation dated November 27th, 1871, on the part of H. W. Genet, Richard B. Connolly, Thomas C. Fields, Wm. M. Tweed, Cornelius Corson, Charles E. Wilbour, Peter B. Sweeney, A. Oakey Hall, and Henry Hilton as Executive Committee provided in the third section of said Act of 1871.

Mr. GANS: The same objection to this as to previous exhibits; also that a paper of this sort is no proof of the resignation of the persons named therein; furthermore that the assignment purporting to be made by them is beyond any power conferred upon them by the Act.

Mr. BURR: The same objections.

Mr. GANS: And also, that there is no evidence that the persons

named therein were ever elected as an Executive Committee under provisions of said Act, and no evidence that they were ever qualified to be such Executive Committee.

Mr. BURR: The same objection.

1192 The paper was received and marked Complainant's Exhibit 179.

Mr. MATHEWSON: I also offer in evidence an instrument dated November 27th, 1871, signed by Hugh Smith and James M. Sweeney, reciting that they have been duly elected pursuant to the third section of the said Act of 1871, as an Executive Committee as therein provided for, and releasing, relinquishing, assigning and setting over to C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, all and every their right, title and interest as grantees or assignees in and to the charter, franchise and authority granted by the said Act.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 180.

Mr. MATHEWSON: I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, to William Foster, Jr., of the City of New York, to all and every our joint and several rights, title and interest as owned by intermediate assignments from Isaac P. Martin, William P. Smith, Edward Jones, Shepherd F. Knapp and William R. Dyer, or their assignees, as original grantees under said Act of 1871, said assignment being dated February 14th, 1874.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 181.

1193 Mr. MATHEWSON: I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H. Waddell, to Eben F. Bacon, of all the rights of the grantors acquired by intermediate assignments from Edward Taylor, Joseph Murphy, Walter Smith, Joel A. Fithian and William H. Bloom, or their assignees, under said Act of 1871, said assignment being dated February 14th, 1874.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 182.

Mr. MATHEWSON: I also offer in evidence original assignment from Cornelius S. Bushnell, Henry J. Davison and Gordon H. Waddell, to James M. Townsend, of all the rights of the grantors

acquired by intermediate assignment from George H. Wicks, John E. Cronly, John C. Angell, Edward J. Shandley, Joseph G. Jennings, Henry Johnston, or their assignees, under said Act of 1871, said assignment being dated February 14th, 1874.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 183.

Mr. MATHEWSON: I do not understand that there is any question in regard to these signatures.

Mr. GANS: We do not admit any of them and raise every possible objection in regard to the authenticity of these instruments. I do not know but that the Master may know them, and if he
1194 is willing to take judicial notice over my objection, he may do so of course.

Mr. MATHEWSON: I do not think that there is any question of that kind in regard to instruments as obviously genuine as these are.

I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H. Waddell to Samuel J. Young transferring the interest of the assignors derived by intermediate assignments from William Vail, William H. Murphy, Patrick Quinn, George Chivvis, John H. Johnston, William Higgins or their assignees under said Act of 1871, said assignment being dated February 14, 1874.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit 184.

Mr. MATHEWSON: I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H. Waddell to Charles E. Appleby of all the interest of the assignors acquired by intermediate assignments from Andrew J. Smith, Henry A. Smith, Richard H. Vaughan, Joseph Bell, Delavan Peck, John J. Walsh or their assigns, under said Act of 1871, said assignment being dated February 14, 1874.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 185.

Mr. MATHEWSON: I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H.
1195 Waddell to Paschal W. Turney of all the interest of the assignors by intermediate assignments from William Johnston (otherwise called William Johnson), Jas. S. Turner, Thomas Y. Avery, John Balmore, Henry S. Murray and Peter H. Baxter, Jr., or their assigns under said Act of 1871, said assignment being dated February 14, 1874.

Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 186.

Mr. MATHEWSON: I also offer in evidence original assignment from C. S. Bushnell, Henry J. Davison and Gordon H. Waddell to Henry H. Porter of all the interest of the grantors acquired by intermediate assignment from Matthew T. Brennan, Charles E. Loew, Edgar Brower, John J. Turner and John Cox or their assigns under said Act of 1871, said assignment being dated February 14, 1874.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 187.

Mr. MATHEWSON: I also offer in evidence original indenture between William Foster, Jr., James M. Townsend, Paschal W. Turney and Eben F. Bacon, Charles E. Appleby, Henry H. Porter and Samuel J. Young of the first part, to the Union Gaslight Company of the City of New York of the second part, transferring to the said company all their rights to Act under the franchise granted
1196 by the Act of 1871, among other things, said assignment being dated the 25th day of February, 1874.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
The paper was received and marked Complainant's Exhibit No. 188

Mr. MATHEWSON: I also offer in evidence original assignment from William Foster, Jr., to Robert M. C. Graham of all the rights acquired by said grantor by intermediate assignment from Isaac P. Martin, William P. Smith, Edward Jones, Shepherd F. Knapp, and William R. Dyer, under said Act of 1871, said assignment being — the fifth day of December, 1876.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.
Mr. Gans and Mr. Burr except.
Received and marked Complainant's Exhibit No. 189.

Mr. MATHEWSON: I also offer in evidence original assignment from Edward F. Bacon to John Sickels of the City of New York, of all the interest acquired by the grantors acquired by intermediate assignment from Edward Taylor, Joseph Murphy, Walter Smith, Joel Fithian and William H. Bloom, acquired under said Act of 1871, said instrument being dated the 5th day of December, 1876.
Mr. GANS: Same objection.
Mr. BURR: Same objection.
The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

Received in evidence and marked Complinant's Exhibit No. 190.

Mr. MATHEWSON: I also offer in evidence original as-
1197 signment from James M. Townsend, dated December 5th, 1876, to Jared E. Redfield, of all the interest acquired by the assignors through intermediate assignment from George N. Wicks, John E. Cronley, John C. Angell, Edward J. Shandley, Joseph G. Jennings and Henry Johnston, under the said act of 1871.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 191.

Mr. BURR: I should like to have it understood that we make such further objections as seems proper upon inspection of these instruments.

The MASTER: You may note objections on the record, certainly.

Mr. MATHEWSON: But we must be informed of them.

The MASTER: Oh, yes.

Mr. MATHEWSON: I also offer in evidence original assignment from Samuel J. Young to George Howes, of all the interest acquired by the assignor by intermediate assignment from William Vail, William H. Murphy, Patrick Quinn, George Chivvis, John H. Johnston and William Higgins under said act of 1871, dated December 5, 1876.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 192.

Mr. MATHEWSON: I also offer in evidence original assign-
1198 ment from Charles E. Appleby to Tilton E. Doolittle, of all the interest acquired by the assignor by intermediate assignment from Andrew J. Smith, Henry A. Smith, Richard H. Vaughan, Joseph Bell, Delavan Peck and John J. Walsh, under said act of 1871, said assignment being dated December 4th, 1876.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 193.

Mr. MATHEWSON: I also offer original assignment from William Foster, Jr., James M. Townsend, Evan F. Bacon, Charles E. Appleby, Henry H. Porter and Samuel J. Young, to Walter Osborn, of all the rights of the grantors as survivors of Paschal W. Turney, deceased, under the provision of the agreement dated the 25th day of February, 1874, between grantors and said Paschal W. Turney of the first part, and the Union Gas Light Company of the second part, it being recited that it is the intention of the assignment to

vest in said Walter Osborn all the right, title and interest of said Paschal W. Turney as owner of certain grants and franchises from certain of the original grantees named in said act of 1871, and vested the assignors as survivors of said Turney under said agreement of February 25th, 1874, and by said instrument survivors also elected to appoint Walter Osborn a member of the Executive Committee existing under section 3 of said act of 1871, this instrument being dated the 5th of December, 1876.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

1199 The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 194.

Mr. MATHEWSON: I also offer in evidence a release from Charles E. Appleby, William Foster, Jr., and James M. Townsend, Eben F. Bacon and Samuel J. Young, recited to be the surviving members of the Executive Committee duly holding office under section 3 of Chapter 944 of the Laws of 1871, relinquishing, assigning and setting over to Robert M. C. Graham, Tilton E. Doolittle, Jared E. Redfield, John Sickels, George Howes, Walter Osborn and Henry H. Porter, and their assigns, all the rights, powers and control which the subscribers to said instrument have acquired or can in any way exercise or have as such Executive Committee, said assignment being dated the 5th day of December, 1876.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 195.

Mr. MATHEWSON: I also offer in evidence an instrument executed by the Union Gas Light Company, dated December 11, 1876, consenting that William Foster, Jr., James M. Townsend, Eben F. Bacon, Charles E. Appleby, Henry H. Porter and Samuel J. Young, the assignees and owners of intermediate assignments from the original grantees of the charter, grant, franchise and authority granted by the State by said Act of 1871, the owners by right of survivorship of the rights, title and interest of Paschal W. Turney, deceased, may assign, transfer and set over to Robert M. C. Graham,

1200 Tilton E. Doolittle, Jared E. Redfield, John Sickels, George Howes, Walter Osborn and Henry H. Porter, all of said interests, said consent being given under the provisions of a certain agreement of February 25th, 1874, between William Foster, Jr., *et al.*, and the said Union Gaslight Company; and said instrument requesting said Graham, Doolittle, Sickels, Howes, Osborn and whoever may be associated with them, to grant and delegate to the Knickerbocker Gaslight Company of the City of New York all the rights and privileges as agents and attorneys heretofore granted and delegated to said Union Gaslight Company, and also requesting said Foster, Townsend, Bacon, Appleby, Porter and Young, surviving members of the Executive Committee under said Act, to elect Walter

Osborn a member of said Executive Committee, to fill the vacancy caused by the death of Paschal W. Turney, and to assign to said Osborn all the right, title and interest of said Turney.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 196.

Mr. MATHEWSON: I also offer in evidence original assignment, dated August 10, 1876, from Charles E. Appleby, receiver of the Union Gaslight Company, assigning to Clark Bell all the interest of the Union Gaslight Company or said receiver in a certain contract made by said Union Gaslight Company with William Foster, Jr., and certain other grantees of the grants made by the State of New

1201 York, known as Chapter 944 of the Laws of 1871, said contract being dated the 25th day of February, 1874, and all the right, title and interest of said company or said receiver in and to said grants.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit 197.

Mr. MATHEWSON: I also offer in evidence original indenture, dated December 11, 1876, between Robert M. C. Graham, Tilton E. Doolittle, Jared E. Redfield, John Sickels, George Howes, Walter Osborn and Henry H. Porter, of the first part, and Knickerbocker Gas Light Company of the second part, reciting said act of the legislature and various assignments, and the party of the second part covenanting to perform all work, labor and services contemplated by said act for the beneficial exercise of the rights and privileges thereby granted.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 198.

Mr. MATHEWSON: I also offer in evidence consent of the Knickerbocker Gas Light Company, dated May 20, 1878, that Robert M. C. Graham, Tilton E. Doolittle, Jared E. Redfield, Walter Osborn and Henry H. Porter, five of the assignees and owners of the charter, grants, franchise, etc., under said act of 1871, assign to William Bayard Cutting, Robert F. Cutting, M. Bayard Brown, O. P. C. Billings and William W. Moir all said interest, said consent

1202 being given under the provisions of the agreement of December 11, 1876, between the individuals named and said Knickerbocker Company.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 199.

Mr. MATHEWSON: I also offer original consent signed by Jared E. Redfield, Tilton E. Doolittle, R. M. C. Graham, Walter Osborn and H. H. Porter, five of the members of the Executive Committee under said act of 1871, releasing and assigning to William Bayard Cutting, Robert F. Cutting, M. Bayard Brown, O. P. C. Billings and William W. Moir and their assigns all the rights, powers and control which said assignors had or could exercise as such Executive Committee.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 200.

Mr. MATHEWSON: I also offer in evidence general release executed by Walter Osborn, Tilton E. Doolittle and Jared E. Redfield, individually and as receivers of the Townsend Savings Bank of New Haven to the Knickerbocker Gas Light Company and its successors, dated May 20, 1878, of any claims which they may have against said company.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

1203 & 1204 The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 201.

Mr. MATHEWSON: I also offer in evidence original instrument dated March 11, 1880, executed by the Knickerbocker Gaslight Company, consenting that William Bayard Cutting, Robert F. Cutting, M. Bayard Brown, O. P. C. Billings, William W. Moir, John Sickels and George Howes, assignees and owners by intermediate assignments of the original charter, grant and franchise granted by said Act of 1871, transfer and set over to O. Ottendorfer, H. E. Gawtry, Henry Day, Philip Allen, Charles G. Francklyn, Peter Gardner and S. C. Thompson all of their interests, said consent being under a certain agreement dated December 11, 1876, between the individuals first named and said Knickerbocker Gaslight Company.

Mr. GANS: Same objection.

Mr. BURR: Same objection.

The MASTER: Objection overruled.

Mr. Gans and Mr. Burr except.

The paper was received and marked Complainant's Exhibit No. 202.

Adjourned to Friday, August 24, 1906, at 1:30 P. M.

Last Exhibits:

Complainant's 202.
State's N.
City's 34.

1205 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *August* 24, 1906—1:30 o'clock p. m.

Met pursuant to adjournment.

Owing to the absence of Mr. Gans, the hearing set for this hour was adjourned to 3 P. M., this day.

1206 AUGUST 24TH, 1906—3 p. m.

Present: The Master, Mr. Mathewson, Mr. Meade, Mr. Page, Mr. Burr, Mr. Gans (4:27 P. M.).

Mr. MATHEWSON: I offer in evidence original instrument dated the 20th of May, 1878, executed by Jared E. Redfield, relinquishing and assigning to William W. Moir, all his rights and interests as owner by intermediate assignments of George H. Wicks, John E. Cronly, John C. Angell, Edward J. Shandley, Joseph G. Jennings, and Henry Johnson, original grantees under said act of 1871.

Mr. BURR: Objected to on all the grounds stated heretofore.

Mr. PAGE: Same objection on behalf of the State.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 203.

Mr. MATHEWSON: I also offer in evidence instrument dated the 20th of May, 1878, executed by Tilton E. Doolittle, relinquishing and assigning to Oliver P. C. Billings all the rights and interest of Doolittle by intermediate assignments from Andrew J. Smith, Henry A. Smith, Richard H. Vaughn, Joseph Bell, Delavan Peck and John J. Walsh under said act of 1871.

Mr. PAGE: Same objection.

Mr. BURR: Same objection.

1207 The MASTER: Objection overruled.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 204.

Mr. MATHEWSON: I also offer in evidence original instrument dated May 20, 1878, executed by Robert M. C. Graham, relinquishing and assigning to M. Bayard Brown all Graham's rights and interest by assignment from William Foster, Jr., and by intermediate assignments from Isaac P. Martin, William P. Smith, Edward Jones, Shepherd Knapp and William R. Dyer, grantees under said act of 1871.

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
The MASTER: Same ruling.
Mr. Page and Mr. Burr except.
Received in evidence and marked Complainant's Exhibit 205.

Mr. MATHEWSON: I also offer in evidence original paper executed by Henry H. Porter, relinquishing and transferring to Robert F. Cutting all his interest and title by intermediate assignment from John Cox, John J. Turner, Edgar Brower, Charles E. Loew and Mathew T. Brennan, grantees under said act of 1871.

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
The MASTER: Same ruling.
Mr. Page and Mr. Burr except.
Received in evidence and marked Complainant's Exhibit 206.

Mr. MATHEWSON: I also offer in evidence original instrument executed by Walter Osborn, relinquishing and assigning to William Bayard Cutting all his rights and interest as assignee of William Foster, Jr., James M. Townsend, Eben F. Bacon, Charles E.
1208 Appleby, Henry H. Porter and Samuel J. Young, the survivors of Paschal W. Turney, deceased, and of which said Turney was the owner by intermediate assignments from Thomas Y. Avery, John Balmore, James S. Turner, William Johnston, Henry S. Murray and Peter H. E. Baxter, Jr., original grantees under said act of 1871.

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
The MASTER: Same ruling.
Mr. Page and Mr. Burr except.
Received in evidence and marked Complainant's Exhibit 207.

Mr. MATHEWSON: I also offer in evidence original instrument executed by William W. Moir, relinquishing and assigning to Charles G. Francklyn all his interest and rights by intermediate assignment from George H. Wicks, John E. Cronly, John C. Angell, Edward J. Shandley, Joseph G. Jennings and Henry Johnson, original grantees under said act of 1871.

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
The MASTER: Same ruling.
Mr. Page and Mr. Burr except.
Received in evidence and marked Complainant's Exhibit 208.

Mr. MATHEWSON: I also offer in evidence original instrument executed by Oliver P. C. Billings, dated the 9th day of March, 1880, relinquishing and assigning to Philip Allen all his rights and interest by intermediate assignments from Andrew J. Smith, Henry A. Smith, Richard H. Vaughn, Joseph Bell, Delavan Peck and John J. Walsh, original grantees under said act of 1871.

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
1209 The MASTER: Same ruling.
Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 209.

Mr. MATHEWSON: I also offer original instrument, dated March 11, 1880, executed by M. Bayard Brown, relinquishing and assigning to Henry Day all his right and interest by assignment from William Foster, Jr., and by intermediate assignments from Isaac P. Martin, William P. Smith, Edward Jones, Shepherd F. Knapp and William R. Dyer, original grantees under said act of 1871.

Mr. PAGE: Same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 210.

Mr. MATHEWSON: I also offer original instrument, dated the 11th of March, 1880, executed by Robert F. Cutting, relinquishing and assigning to H. E. Gawtry, all his right and interest by intermediate assignments from John Cox, John J. Turner, Edgar Brower, Charles E. Loew and Mathew T. Brennan, original grantees under said Act of 1871.

Mr. PAGE: Same Objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 211.

Mr. MATHEWSON: I also offer original instrument executed by William Bayard Cutting, dated March 11, 1880, relinquishing and assigning to O. Ottendorfer all his rights and interests as
1210 assignee of William Foster, Jr., James M. Johnson, Eben F. Bacon, Charles E. Appleby, Henry H. Porter and Samuel J. Young, the survivors of Paschal W. Turney, deceased, of which said Turney was owner by intermediate assignments from Thomas Avery, John Balmore, James S. Turner, William Johnson, and Peter H. E. Baxter, Jr., original grantees under said Act of 1871.

Mr. PAGE: Same Objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 212.

Mr. MATHEWSON: I also offer original instrument, dated March 11th, 1880, executed by George Howes, selling and relinquishing to S. C. Thompson, all his right and interest by intermediate assignments from William Vail, William H. Murphy, Patrick Quinn, George Chivvis, John H. Johnston and William Higgins, original grantees under said Act of 1871.

Mr. PAGE: Same Objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 213.

Mr. MATHEWSON: I also offer in evidence original instrument executed by John Sickels, dated March 10, 1880, transferring and assigning to Peter Gardner all his interest and rights by intermediate

assignment from Edward Taylor, Joseph Murphy, Walter Smith, Joel A. Fithian and William H. Bloom, original grantees under said Act of 1871.

Mr. PAGE: Same Objection.

Mr. BURR: Same objection.

1211 The MASTER: Same ruling.

The Master: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 214.

Mr. MATHEWSON: I also offer original instrument executed by W. Bayard Cutting, M. Bayard Brown, R. Fulton Cutting, William W. Moir, Oliver P. C. Billings, John Sickels, and George Howes, dated the 11th of March, 1880, being members of the Executive Committee holding office under Section 3 of Chapter 944 of the Laws of 1871, leasing and relinquishing and assigning all the rights, powers and control which had been acquired by the assignors or which they could in any way exercise or have as such Executive Committee, to O. Ottendorfer, H. E. Gawtry, Philip Allen, Charles G. Franklyn, Peter Gardner, S. C. Thompson and their assigns.

Mr. PAGE: Same objection.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

Received in evidence and marked Complainant's Exhibit 215.

Mr. PAGE: I make an application for adjournment on the ground of Mr. Gans' illness.

The MASTER: Mr. Mathewson, what is your attitude on the subject?

Mr. MATHEWSON: I do not want to be discourteous, of course, and on the other hand I do not want to take any advantage of Mr. Gans' illness. If I thought what I intended to offer immediately would be new matter or of sufficient importance so that he ought to be here,

I would join in the application. But really, I do not think

1212 that what I have immediately before me will be considered of such importance, and unless you and Senator Page, as it proceeds think otherwise, I would very much like to put in a certain amount that I have here, even if the session is made a short one on that account.

The MASTER: It seems to me, as we have already held this hearing for a couple of hours on account of Mr. Gans' absence and there is no very definite information about his condition, and inasmuch as there are counsel here for the other defendants who can protect all his rights; inasmuch also as the witness proposed to be examined is one who is available at any time, and as I would allow Mr. Gans on returning to note any objections or make any motions that he might have desired if present, that we had better save time by proceeding.

Mr. PAGE: With regard to Mr. Carter, as I understood, Mr. Mathewson had completed his re-direct examination until I should have completed my cross-examination. If I had known that Mr. Carter was to be produced to-day, I would have asked Mr. Mathew-

son to postpone his examination, because Mr. Cuthbert, as I understand, has been working with Mr. Carter and he told me that he expected to put the matter in my hands Monday morning. I am ready and willing to take up the further cross-examination of Mr. Carter just as soon as I can get that report in my hands. Or if I had known you were going to produce him to-day I would have gotten together such matter as I have and completed it last night and this morning and have been ready to cross-examine him. I do not want to be foreclosed of my right to cross-examine Mr. Carter by Mr. Mathewson producing him at this time and consuming the rest of his time with his witnesses and then closing his case and making me
1213 go to the court, which I think is the object.

Mr. MATHEWSON: My idea, Senator, in producing Mr. Carter today was one which really was an inconvenience to me. I had not intended to do so until I ascertained that Mr. Gans was ill, and I suspected that it was possible that he might not be able to be here at 3 o'clock, so instead of producing a new witness like Mr. Addicks, whom Mr. Gans had not seen at all, I thought I would resort to the inconvenience of proceeding to examine Mr. Carter on the redirect on certain matters he has already been examined upon by you and by Mr. Burr, and consume the time in that way without any idea of foreclosing the time for cross-examination to which you are now entitled. And I also intended to produce Mr. Francklyn for a few minutes with reference to the rents, with regard to which you recollect you examined him. And as far as I am concerned, I make no application at this time that the cross-examination of Mr. Carter be closed, but am willing that Mr. Page have a further opportunity, if he gets his report Monday morning.

The MASTER: Certainly, that is understood.

Mr. MATHEWSON: I would much prefer to have proceeded the other way, but I am proceeding in this way because this situation has arisen.

Mr. PAGE: I do not want to be captious, but I do not want my good nature to be abused, either.

Mr. MATHEWSON: Well, I will offer in evidence Chapter 736 of the laws of 1905, being the Act mentioned in the complaint purporting to establish a rate of 75 cents to the City of New York for gas.

1214 Received and considered as Complainant's Exhibit No. 216.

Mr. MATHEWSON: I also offer in evidence Chapter 125 of the laws of 1906, being the Act mentioned in the bill of complaint, purporting to establish 80 cents as the charge for gas to private consumers other than the city.

Received and considered as Complainant's Exhibit No. 217.

The MASTER: That is not objected to, I assume.

Mr. PAGE: No, that is an entirely unobjectionable act.

Mr. MATHEWSON: I also offer in evidence Chapter 385 of the Laws of 1897, being the Act establishing the dollar rate in the City of New York by graduation of 5 cents per annum from $1.25, the dollar rate taking effect January 1, 1901.

Received and considered as Complainant's Exhibit 218.

Mr. MATHEWSON: I also offer in evidence complaint filed with the Commission of Gas and Electricity, dated August, 1905, executed by Edward C. Keyes and others.

Paper received and marked Complainant's Exhibit 219.

Mr. MATHEWSON: I also offer in evidence complaint filed with the State Commission of Gas and Electricity, dated August 17, 1905, executed by R. H. and M. McGurrin and others. These two being the complaints referred to in the bill of complaint.

Paper received and marked Complainant's Exhibit 220.

Mr. MATHEWSON: I also offer in evidence original order executed by the members of the State Commission of Gas and Elec-
1215 tricity, bearing the seal of the Commission, dated February 23, 1906, based upon the two complaints just offered in evidence, purporting to establish a rate of 80 cents per thousand cubic feet in the City of New York, at which gas shall be supplied by the Consolidated Gas Company.

Paper received and marked Complainant's Exhibit 221.

Mr. MATHEWSON: I also offer in evidence a memorandum or statement handed out by said State Commission of Gas and Electricity, dated the 23d day of February, 1906, a copy of which is attached to the complaint in this action.

Mr. PAGE: That is objected to as immaterial, irrelevant and incompetent. Any statement that may have been handed out by the Commission, not being an official act but their personal declaration, cannot be proved in this manner. It is mere hearsay.

Mr. BURR: I join in the objection.

Mr. MATHEWSON: If the Master please, the bill of complaint in this action alleges at paragraph 21 that the opinion or statement rendered by the State Commission in connection with this said order——

The MASTER: It is alleged in the bill, folio 72, that this memorandum or opinion was filed with the order.

Mr. PAGE: Yes, and that is denied in the answer.

Mr. MATHEWSON: But if you will read Section 21, a little further on. Now, this allegation of paragraph 21 is admitted by the City of New York in its answer, that this statment was rendered, whatever that may mean. The Gas Commission, the Attorney-General and Mr. Jerome in their answer admit that a statement was made "to the public press," but that it was not an opinion, and that it
1216 did not cover all the reasons of the Commission.

The MASTER: What folio is that?

Mr. MATHEWSON: Folios 85 and 86. If the Senator has a copy of his answer——

Mr. PAGE: I have not.

Mr. MATHEWSON: If you find it in the answer of the City——

The MASTER: I find it in the answer of the City, but do not find it in the answer of the Commission.

Mr. MATHEWSON: To the public press merely. Now, that it was handed out by the Commission, I understand, is not denied. It is absolutely admitted by one defendant and it is not denied by an-

other. Perhaps the fact is, as I think it will be conceded, that coincidentally with the filing of the order, on the same day, the memorandum, a copy of which is attached to the complaint, was delivered by the Commission through their secretary to various members of the press as the statement of the Commission. Whether a copy was kept by the Commission, whether it was filed or whether you call it an opinion is a matter of complete indifference to us. We shall not attempt to characterize it or to claim or prove that it was filed. That it was handed out I suppose Senator Page will not deny. I have here copies that were handed out by the Commission through their secretary, two or three copies at that time. And Judge Lacombe, as you will recall, in his opinion referred to the fact that the Commission in their opinion excluded franchises, and he referred to the opinion as a basis upon which his conclusion apparently was reached. Now, if the Senator desires me to call the secretary
1217 of the Commission to prove the physical act of handing these out with the consent of the Commission, I can do it, but it seems to me it is almost a waste of time, the fact being undisputed.

The MASTER: How is that, Senator? Do you dispute that fact, that a copy was handed out to the press?

Mr. PAGE: That a copy was given out to the press by the Secretary of the Commission——

Mr. MATHEWSON: By authority of the Commission.

Mr. PAGE: I do not know whether it was by authority of the Commission or whether it was prepared by one Commissioner or what. As I understand this was given to the press, this statement.

Mr. MATHEWSON: On the same day that the order was filed, February 23d, last.

Mr. PAGE: The same day that the order was published. It was about the same time. By whom this statement was prepared, I do not know, but I do know that it was not an opinion and it was not filed as an opinion and it does not purport to state the entire grounds of their decision and they have so stated under oath.

The MASTER: That of course is a question more or less of argument. It seems to me the real question to be determined here now is as to the matter of fact, and that is simply between you and the Senator. You have got this in the record and it is in your pleadings, and it is admitted by the city that it was rendered. Of course that does not bind the Senator.

Mr. PAGE: How does it bind the Commission, for whom I appear?

Mr. MATHEWSON: I call your attention to the first clause, in announcing this decision in the matter of complaints against the
1218 Consolidated Gas Company, the Commission of Gas & Electricity make the following statement, and it is conceded by the Senator that it was handed out by the Secretary of the Commission. It was handed out as a matter of fact at the Commission's main office in the City of Albany, New York, the same day that the order was made, not only in one copy but in a large copy of duplicate typewritten copies.

Mr. PAGE: I understand that statement is supposedly correct from

my information. I am not quibbling over that part of it, but here you are seeking to predicate reasons for an official act upon a newspaper interview, and if you wish to hold that that is competent proof, take it and give me an exception, that is all.

Mr. MATHEWSON: No, not what the newspapers said, but the statement the Commission handed out through their Secretary, and which they state to be their statement in announcing their decision in the matter of the complaints. It seems to me that the facts as admitted upon the record makes it perfectly competent, and the act of the Commission *prima facie* until somebody denies it.

The MASTER: No, the question seems to me here is to the authenticity of this document which you are offering. In order to get any more force and effect out of that than you already have on the record by your pleadings and admissions made here on the record, you have got to dignify that, it seems to me, by some higher grade of proof.

Mr. MATHEWSON: Do you mean this particular paper that I offer?

The MASTER: Yes, that particular paper.

Mr. MATHEWSON: Or take the memorandum attached to the bill of Complaint.

1219 The MASTER: You are not required to prove allegations that are admitted on the pleadings, are you?

Mr. MATHEWSON: Certainly not.

The MASTER: You allege in your bill that Exhibit E, attached thereto, was rendered and handed out by the Commission. The city admits it and Senator Page denies it and says that it was handed out to the newspapers. How can you hoist yourself up by your boot straps by handing me this typewritten slip and offering that?

Mr. MATHEWSON: I merely offer this for this reason that this is an exact copy, as I will show, of Exhibit E attached to the complaint, and this which I now have in my hand is the original paper or one of them that the Commission handed out.

The MASTER: But where is the proof of that?

Mr. MATHEWSON: That is not disputed.

The MASTER: I do not understand that to be the case.

Mr. MATHEWSON: If that is the question, then I will offer in evidence the memorandum, or whatever it may be, known as Exhibit E, attached to the original bill of complaint, which it is conceded was handed out by the secretary of the Commission under the circumstances which now appear upon the record in this hearing.

Mr. PAGE: That is objected to upon the same grounds as before stated.

Mr. MATHEWSON: I do not understand that the Senator objected that this paper was not handed out. He merely, as I understood, objected to its force.

Mr. PAGE: I object to its competency.

The MASTER: He expressly says he does not know. He
1220 admits that the paper was handed out by the secretary, but he will not admit anything further than that. Now, you already have that. You do not require to prove that. It is admitted in your case.

Mr. MATHEWSON: If you think it is admitted by the defendants,

the Attorney General and the Commission and Mr. Jerome, I am satisfied with it, but it seems to me that the admission is a qualified one.

The MASTER: I should have to exclude that paper as you offer it, but I do not see the necessity of your offering it in view of the condition this record is in, and in view of the Senator's admission here.

Mr. MATHEWSON: Very good.

The MASTER: I think if you want to improve the situation over these pleadings or admissions here, you will either have to call that secretary here or some of those Commissioners themselves and prove the entire pedigree of that document, the particular piece of tissue paper.

Mr. MATHEWSON: I think it would go a long way if I prove that this was handed out by the official secretary of the Commission at their office to any individual.

The MASTER: Undoubtedly, probably it would.

Mr. MATHEWSON: I can prove that if there is any question. I did not suppose there would be any question that such a paper was handed out on that date. If there is, I will call the Secretary or somebody else, but I did not think that the Senator or anybody else had any doubt about its being handed out. Everybody knows it.

Mr. PAGE: I do not know that I am called upon to interpret my objection.

1221 Mr. MATHEWSON: Would you have any objection to my calling a witness on the bulkhead proposition this afternoon?

Mr. PAGE: I do not know that that is anything that either Mr. Gans or myself knows anything about; Mr. Burr will be competent to take care of him.

GILBERT FRANCKLYN recalled for further examination, testified as follows:

Redirect examination by Mr. MATHEWSON:

Q. You were asked for a statement of rentals received by the Consolidated Gas Company?

A. Yes.

Q. Have you had such a statement prepared?

A. Yes, I have prepared such a statement.

Q. Is that it?

A. That is it.

Mr. MATHEWSON: I offer it in evidence.

Mr. BURR: The statement is objected to on the grounds I have previously stated in objecting to all the statements that have been presented.

Mr. MATHEWSON: You yourself asked that that statement be prepared, and Mr. Francklyn has appeared here for the express purpose of presenting it.

Mr. BURR: You recall the explanation which was made?

Mr. MATHEWSON: I withdraw the offer.

Mr. BURR: We are not to be foreclosed, by the production of any statement, from examining the original sources of information contained in the statement.

Mr. MATHEWSON: Then I ask that this be merely marked for identification.

1222 The statement is marked for identification, Complainant's Exhibit 222.

Q. Does this statement, Complainant's Exhibit 222 for identification, include the amount which is paid by the National Coke & Coal Company for the part used by them of the 41st Street stable, $1,800?

A. No, the statement does not include that.

Q. So, that if for any purpose the National Coal & Coke Company should be considered as separate, that $1,800 should be added?

A. It should be $1,800 more, yes.

Q. Referring to the first four lots mentioned on Complainant's Exhibit 222 for Identification, 326, 328, 330 and 333, Avenue A, are those full sized city lots?

A. No, sir, they are all small lots; they are both narrow and short.

Q. And they are parts of the large parcels shown on Exhibit No. 48, the balance of the parcels being used for gas works?

A. They are.

Q. Taking No. 329 Avenue A, the upper floor, for what is the lower floor used, do you know?

A. The lower floor is used for a meter shop, gas fitting shop.

Q. By the company, the Consolidated Gas Company?

A. By the Consolidated Gas Company, yes.

Q. Taking No. 605 West 44th Street and No. 606, 608 and 610 West 45th Street, are those lots full city lots?

A. 605 West 44th Street is a full city lot.

Q. And the other three?

A. The other three are two city lots—three of them form two full-sized lots.

Q. Are those fractions of large plots that the company owns?

A. They are; the rest of them are used by the company for making gas.

Mr. PAGE: I object to the characterization. Let him tell what it is used for.

Mr. MATHEWSON: He says it is used for making gas.

1223 Mr. PAGE: I move that the last answer be stricken out.

The MASTER: Strike it out.

Q. What is the balance of the plot used for?

A. Making gas.

Mr. PAGE: I object to that answer. You cannot use a lot for making gas. That is a conclusion.

The MASTER: Oh, yes you can. I will let that stand.

Mr. PAGE: You cannot make gas out of a lot. I want to know what specific purpose that is devoted to in his business.

The WITNESS: May I answer the question more specifically?

The MASTER: That is matter for cross-examination.

Mr. GANS: I take it that there is some substance to that objection. It is not merely a question as to the form of it.

The MASTER: That has already been ruled on. I have no objec-

tion to your discussing it, but I don't see the use of it. Note the Senator's exception.

Q. Referring to 421 East 60th Street and 420 East 61st Street, shown on Complainant's Exhibit 224 for identification, are those also a city lot each?

A. The houses occupy roughly a city lot each. They are irregular shaped houses. They do not occupy more than a city lot in extent.

Q. And are those two lots a part of the parcel between 60th and 61st Streets and Avenue A, which you have testified was intended for distributing holders?

A. They are part of that plot.

1224 Q. 222 West 65th Street, shown on the same exhibit?

A. That is a full city lot.

Q. Is that a part of a larger plot, which you have testified was to be used for valve houses, plans for which are filed?

A. Yes; it was acquired at the same time with that parcel.

Q. 99th Street and First Avenue; is that adjoining the 99th Street works?

A. Yes, that is one of the pieces of land which we know as the 99th Street works.

Q. And occupied by the foreman of the works?

A. Occupied by the foreman of the Street Department.

Q. How are the works located in relation to this lot, adjoining or surrounding this 99th and First Avenue lot?

A. That is the corner, 99th Street and First Avenue. The whole block is used for gas making except that one piece.

Q. Where is 325 Avenue A, shown on this exhibit?

A. On the northwest corner of Avenue A and 20th Street.

Q. Is that one city lot or something else?

A. It is a small city lot, not a full city lot.

Q. What is the balance of that block used for?

A. It is used for gas making and also for a meter shop, 329 Avenue A, which I have already testified about.

Mr. GANS: Now, I move to strike out his answer to the extent that he says that some property is used for gas making, on the ground that that involves a conclusion of the witness as to the very matter in issue.

The MASTER: Motion denied.

Mr. GANS: Exception.

Q. And this property between 17th and 18th Street, Ave-
1225 nues B and C, as shown on Exhibit No. 222 for identification, rental $3,170, comprises how much land?

A. There are, roughly speaking, about eight city lots there; rather less than eight city lots.

Q. Is that part of a large plot used by the gas company?

A. It adjoins property on which two gas holders are built, and also property which is used by the street department for storing pipe, castings.

Q. The property between 18th and 19th Streets, 10th Avenue and

the marginal street, a rental of $2,000, comprises how much property?

A. Five city lots.

Q. You already testified as to the balance of that, storing of gas material?

A. Yes.

Q. And the property on the south side of 112th Street, west of First Avenue, rental $200, comprises how much?

A. That is two city lots, two full lots.

Q. Is this a part of the plot which you have testified was used for a stable?

A. It is adjoining the stable on the rear.

Q. Do you know what purpose there is, or whether there is any purpose in reference to that stable, requiring those lots?

Mr. GANS: I object to that, as to the purposes of the company in regard to the stable.

The MASTER: That is objectionable, Mr. Mathewson, it seems to me.

Q. I will ask you this. Do you know whether there is any intention with reference to enlarging the stables there?

Mr. GANS: I object to that as perfectly immaterial, what the intentions of this company are in the future; we are inquiring into present conditions.

1226 The MASTER: It seems to me the question is objectionable in form, though I must say I have very little sympathy with these technical objections in a proceeding of this kind. It is not in accordance with our United States practice to spend time on such things as this. You will only take time by either side by doing this. If they want to get the fact before the Court to have it passed on, they can do it in some form or another, by putting in facts, I suppose.

Mr. GANS: I do not care to let go by any right which it seems to me the State has, in such a way that we may not have the right hereafter. I do not desire to be technical, but I desire to raise every point necessary to safeguard the interests of the State. This is a perfectly definite thing, a perfectly definite line of proof. We have all agreed hitherto, I thought, that the question was as to the present condition, and that is what we are inquiring into. It seems to me perfectly proper that I should object to anything that goes beyond that.

The MASTER: It is quite proper to object, but if it appears on the record in the testimony that it is a matter of intention to build a stable hereafter, I do not see why you cannot base any argument on it that you would like to, just as exactly as well without having formal rulings on questions as to the matter of evidence. My only desire is to save time. I suppose that they can bring witnesses here to prove, as a matter of fact, the number of horses they had, and the number of stalls and the present stable capacity, and that the present stable is inadequate, or something of that sort. Then there will

be facts from which they will ask me to make a deduction
1227 that it is a reasonable intention for the future to enlarge the stable. That would take eight or ten pages, possibly, as against one or two questions or answers.

(Here followed some further discussion which the stenographer was directed by the Master not to take.)

The MASTER: Read the question.

(The question is repeated by the stenographer.)

The MASTER: That is objected to; the objection is sustained and Mr. Mathewson excepts. (To the witness:) Now you may answer it.

A. Yes, there is an intention to enlarge the stables there.

Mr. PAGE: I do not know that it is necessary, to reserve our right, to move to strike out the answer on the record.

The MASTER: No, it has to be taken under the ruling. I think you have enough exceptions on that.

Q. What would the extension cover?

Mr. GANS: That will be taken the same way I suppose?

The MASTER: Yes.

A. That I do not know.

Q. I mean, would it affect the two lots?

A. I am informed that it would.

Q. In reference to those rentals which are specified on Complainant's Exhibit 222 for identification, do you know whether they are permanent or whether they are terminable at any time on short notice?

A. They are all terminable at any time on short notice
1228 with the exception of the Shadyside lease; that is a year's lease.

Q. That is the last item on Complainant's Exhibit 222 for identification?

A. Yes, sir.

Q. And that is in New Jersey?

A. It is in New Jersey.

Recross-examination by Mr. PAGE:

Q. Each of these pieces of property to which you have testified is rented by the company at this time for some purpose to some person?

A. Yes.

Q. Nos. 605, 606, 608 and 610 W. 45th Street are rented to whom?

A. That should be 605 W. 44th Street and 606, 608 and 610 W. 45th Street.

Q. Yes.

A. They are rented to various tenants.

Q. What portion of the building is rented to tenants?

A. The whole portion of each building; the whole buildings.

Q. Connected with the building is there a yard?

A. Yes, there is a small yard behind the 45th Street house, and there is a yard in front of the house on 44th Street.

Q. Now, as I understand, Nos. 606, 608 and 610 occupy the space of 50 by 100?

A. Yes, that is right; that is leaving out the inches; there were a few inches one way or the other.

Q. And these buildings are occupied by tenants are they?

A. Yes.

Q. Now, as far as these identical lots or pieces of property are concerned, they are not used in any way in the business of the company?

A. Not except to the extent that some of our workmen occupy them as tenants.

Q. Do your workmen produce gas in the tenements for you?

A. Not in the tenements, no.

Q. Do you consider that your plant extends to wherever your workmen happen to be living at the time?

1229 Mr. MATHEWSON: I object to that.

The MASTER: I will allow it.

Exception taken by Mr. Mathewson.

A. I should not go so far as that.

Q. Then why did you make this characterization of this particular piece of property, that it is used by the company because workmen live there?

A. Because we find it very convenient in many cases to have workmen live near our works; in case of emergency it is very easy to get at them.

Q. You stated that this property was used for gas making.

A. I did not so intend to state; I do not think I did. I stated the rest of the property in that block was used for gas making.

Q. The rest of the property in that block?

A. In that block of land, yes.

Q. That is between 44th and 45th Streets?

A. 44th and 45th Streets, west of 11th Avenue.

Q. Now, you may state just exactly what buildings are upon that property?

A. There are five gasholders, purifier house, office, generator house, coal sheds, engine room; the house that used to be occupied by benches in the old process of water gas making, I do not know what it is used for now; I think it had some new machinery put in it a short time ago, some old naphtha tanks and tar tanks; I think that takes up practically the whole of the block.

Q. I understand that this list of property that you have given includes all the property of the Consolidated Gas Company that is not occupied by buildings containing gas making plants, for storage of materials, holders or offices?

A. This list?

Q. Yes.

A. That is a list of property which we rent to other people.

Q. I say, it does not include all the property?

A. Only such property as is rented.

1230 Q. Besides that, there are other properties of the Consolidated Gas Company that are set forth on Exhibit 48, that are not occupied by manufacturing plants or holders?

A. Or offices.

Mr. MATHEWSON: He has so testified.

Q. You were asked by Mr. Burr when you were on the stand before if you would furnish a map.

A. I thought Mr. Burr asked me for a list of rentals.

Q. He asked you if you could furnish a map showing exactly the property that was occupied by buildings and holders?

A. Yes, I remember that.

Q. And you said that you could?

Mr. BURR: And the dimensions.

The WITNESS: I do not understand that.

Mr. MATHEWSON: That would mean a survey of all these; they are there; anybody can see them that goes by them.

Mr. PAGE: Mr. Garver, as I understand it, said that he would show that by another witness. That has not been done as yet, and this witness is back here.

A. I have no map showing the locations of the buildings. I do not know of any such maps.

Q. You stated on page 77: "We have maps showing it to a certain extent; I do not know that we have any maps that are absolutely accurate as to that."

A. I have inquired since then, and I find that we have no maps which show that. I do not say that we have no maps that would show it at all, but we have no maps that would show it in an intelligible way.

Q. Will you take Exhibit 48 and state which properties are not occupied by buildings in which are manufacturing plants, holders, offices or shops used by the Consolidated Gas Company?

1231 Mr. MATHEWSON: Stables, street department yards and buildings used for coal storage? That would exclude a lot of property.

A. I went through each piece in detail the first day I was here.

Mr. MATHEWSON: Exactly, what you ask him to do here now. You will find it in the evidence.

Mr. PAGE: Then I do not wish to go over it again. If that is so, the question is withdrawn.

The WITNESS: I think it was on Mr. Burr's examination that I did that.

The MASTER: Pages 71, 72 and 73, etc. Commencing on page 70.

Q. Could you take this list of property that you have testified to to-day and identify that by block and lot number on the city map, so that we may refer to the exhibit that has already been put in?

A. Yes. You mean put the correct city block and lot number opposite each one of these?

Q. Yes, could that be done by any means?
A. I can do most of them.
Mr. MATHEWSON: Would it not be better for you to simply take that and make a statement when you can fill them all in, and hand it in?
A. (Continuing:) Yes, for instance No. 320 Avenue A I think is included in the rest of the block. It is not shown as a separate block, and as to some of them, that objection would come in. (Explains by reference to Exhibit 48.)
Q. Give us the dimensions of that which is not, if you can do that?
A. I will prepare that.

1232 Recross-examination by Mr. BURR:

Q. Have you prepared a statement showing what properties have been sold by the Consolidated Gas Company that were originally purchased by the constituent companies and that do not appear on Exhibit 48?
A. No, I have not prepared any such statement. Was I asked to prepare any such statement?
Q. You were.
A. The property sold by the Consolidated Gas Company that does not appear on this exhibit?
Q. The property that was originally owned by the constituent companies or any of them?
A. No, I have not prepared such a statement.
Q. Will you prepare such a statement?
A. I will prepare such a statement.
Q. And you were also to find out what was the consideration paid for the transfer of the piece of property which appears on page 2 of Exhibit 48, as having been transferred or deeded by the Consolidated Gas Company to the New Amsterdam Gas Company.
A. The consideration for that was $180,000.

By Mr. MATHEWSON:

Q. When was it?
A. It was in 1905.

By Mr. BURR:

Q. Can you prepare a map showing the location and size of the buildings used for gas making purposes and for what particular purposes they are so used?
A. No, sir, I cannot.
Q. That would require an inspection of the buildings themselves?
A. It would require a survey of all our property.
Q. That is used in the gas making business?
A. Of all our property that is used in the gas making business, yes.

1233 Q. I understand you to say now that you were mistaken in your answer as it appears on page 77 of the record stating that you had maps containing that information to a certain extent?

A. Well it depends to what extent you mean. We haven't any maps that would really show anything to a person that did not know the works.

Q. What I would like to have is a map showing the exact size of the buildings which you claim are actually used for gas making purposes and for what particular purpose each building is used?

A. It is possible to make such a map but it is a very elaborate undertaking.

Q. Is that the only objection to making it?

Mr. MATHEWSON: There are further objections, and one is that I don't think they are called upon to do it, I don't think it would be very valuable if you got it. It would not show the yards outside which are necessary for use in driving in carts and one thing or another. It would be of no value to you if made.

Mr. BURR: We have the dimension of the plots. Some of them are vacant, or some portions of them are vacant. I am trying to get at the size of the buildings actually used in the gas making business.

Mr. MATHEWSON: We could not make such a map.

The WITNESS: A lot of the gas making business is done out of doors without any buildings.

Q. That would be shown from your statement as to what parts of this property were vacant?

A. Yes, sir.

Mr. BURR: That is all the questions I have to ask.

Mr. MATHEWSON: I have no more questions, Mr. Francklyn.

1234 ROBERT A. CARTER resumed.

Redirect examination by Mr. MATHEWSON:

Mr. MATHEWSON: I shall not be able to complete my redirect-examination because the cross-examination of Mr. Carter is not yet finished.

Q. The amount of stock which was to be issued for the tangible property and franchises of the company at the outset in 1884 you have testified was $37,775,000. The amount of the stock actually issued was $35,430,060, and the amount of the debts in the shape of bonded indebtedness carrying fixed charges was $2,329,000. That makes a total, according to my figures, of $37,759,060, or a little short of the $37,775,000. Will you explain how this difference was accounted for?

(The witness picks up a paper.)

By Mr. PAGE:

Q. To what are you referring, Mr. Carter?

A. A slip of a memorandum here; some figures I made up some time ago bearing on this particular—not particularly on this question, but that will aid me in answering it.

Q. From what sources did you make that memorandum?

A. The books of the Consolidated Gas Company.

By Mr. MATHEWSON:

Q. Proceed.

A. The difference, Mr. Mathewson, was in some adjustments amounting to $15,940, which operated to increase the amount of the sums of $35,430,060 and $2,329,000, a total of $37,759,060 to $37,775,000.

1235 Q. That difference was paid in cash or some other shape than stock?

A. Yes, sir, in that manner.

Q. You also stated on your cross-examination that in addition to this $2,329,000 there were some other debts of the constituent companies amounting to about $600,000, as you found by the Consolidated Company's books. How were they disposed of?

A. They were an offset to other assets of the companies which consolidated than those which covered appraisals of plant; that is to say, material, supplies, accounts receivable due from consumers and others to the Consolidated Gas Company, the balance being settled in cash by the Consolidated Company.

Q. Those items were assets received from the constituent companies, not included in the $29,994,000 of the original appraisal?

A. That is the case, yes, sir. The amount paid in cash by the Consolidated Company in settlement of all differences to the consolidated companies amounted to $915,716.08.

Q. It exceeded the amount of the debts to which you referred?

A. Yes, sir.

Q. Now you stated on your cross-examination that your information was that the loss on the removal of the manufacturing plants to Astoria, if the manufacturing capacity was so removed, would be in the neighborhood of $10,000,000. Do you know whether in that estimate any considerable value was allotted to the plants in New York which might be dismantled; that is, any receipts for scrap or otherwise?

A. In the case of the coal gas plants, little, if any. In the case of the water gas plants some salvage was taken into account, reducing the amount which would otherwise be lost by reason of that removal from something over $11,000,000 to about $10,000,000, in round figures.

Q. It was not expected any salvage could be obtained from the coal gas works beyond the value of the land?

A. That is the case.

1236 Q. And this water gas salvage would be represented by some apparatus which might be transferred to Astoria if a water gas plant were established at Astoria?

A. That is the case, yes, sir.

Q. Are you an engineer?

A. No, sir.

Q. Your testimony, or certain parts of your testimony before the Joint Legislative Committee and before the Gas Commission has been read in the course of your cross-examination. You recall your testimony before the Stevens Investigating Committee in 1905, in connection with the tax report?

A. I do recall it very well, yes, sir.
Q. Where were you when you were summoned to testify at that time?
A. I was at home, sick.
Q. Were you notified in advance as to the subject upon which you were to be examined?
A. I had no information upon it.
Q. Did you have any opportunity to refresh your recollection as to the facts and figures and methods?
A. None whatever. I didn't even know what the subject was.
Q. So that your answers then given were simply given from recollection of the immediate inquiry, were they?
A. That was the case, yes, sir.
Q. The tax report upon which you were examined was specifically the tax report of what year?
A. 1904.
Q. Made up in 1904?
A. Made up in 1904, as of June 30th of that year.
Q. Have you prepared a statement taking the figures contained in the books of the company as of June 30th, 1904, for the various assets and the amounts at which they appear in the tax report for that year so that we can see at a glance where the differences lay?
A. Yes, sir. I have prepared such a statement.
Q. Is this the statement (handing a paper to witness).
A. Yes, sir.
1237 Q. That is the statement similar to the one presented to the Stevens Committee and to the Gas Commission, the same thing?
A. The figures in here show the investments——
Q. But I merely ask you whether that is the same one?
A. Yes, sir, that is the case.
Q. With the addition of this clause at the bottom, further explanatory?
A. Yes.

Mr. MATHEWSON: I offer this in evidence.
Received in evidence and marked Complainant's Exhibit 223.

Q. Referring now to Complainant's Exhibit 223, it appears that differences are shown between the ledger accounts and the tax reports in three items, Plant, Mains, Services, and the fourth item, Meters, Stoves and Other Personal Property. Now did you make up the figures personally in reference to the services as they appear on the tax report?
A. No, sir.
Q. Or the mains?
A. No, sir.
Q. Or the plant?
A. No, sir.
Q. How about the meters, stoves and other personal property?
A. Those were made up under my direction.
Q. I see that the amount appearing in the tax report appears to

be about 25 per cent. less than the $3,630,772.12 appearing upon the ledger?

A. That is the case, yes, sir.

Q. Will you explain how that difference was arrived at and what it represented?

A. The amount represents a portion of the book value of that property that was written off, to reduce it to such an amount as we would probably realize from the sale of that property under ordinary circumstances.

Q. In case you had to sell the meters at 25 per cent. discount?

A. That is the case.

1238 Q. You don't mean to say that were written off on the books?

A. No, sir, it was not written off on the books.

Q. You mean—by you in presenting that tax report?

A. In making up the figures for the tax report.

Q. Did you consider the $2,667,329.77 as the investment of the company in the meters or as the value to the company as an operating concern?

A. On the contrary, I know that is not the case. It does not represent such value.

Q. Is there any other reason except what you might obtain by forced sale which induced the taking off of that 25 per cent.?

A. That was the only consideration.

Q. As to mains and services, they are stated in one point in the franchise tax report which is in evidence at $3,366,531.38 and the services at $594,625.01. That represents, does it not, 25 per cent. off the amount of $5,613,221.12 for mains and services?

A. That is the case, yes, sir.

Q. As it appears at the foot of this Exhibit No. 223?

A. Yes, sir.

Q. And how much of the amount which I have last specified appears as mains and how much as services, dividing the items?

A. Mains, $4,829,925.82; services, $783,295.30.

Q. Mr. Simpson has testified that he handed to you or sent to the accounting department certain figures representing the cost of labor and material in laying mains in soft earth, and that a total was made in the accounting department from that. Do you remember whether that was the case?

A. That is my recollection, Mr. Mathewson, that that was the case.

Q. Did you know when you testified before the Stevens Committee, or do you know now, except as Mr. Simpson tells you,

1239 upon what basis Mr. Simpson did make up those figures?

A. I didn't know then and I don't know now.

Q. Except as he states?

A. Except as he states it.

Q. Taking the services. From what source did you get your figures in reference to the services?

A. The number of services was furnished by the street department. The price at which they are valued for the purposes of the tax report was first used before I had anything to do with making

the report. The figure, to the best of my recollection, was $8 a piece for the services. That had been in use two or three years when the report was first made up under my personal supervision, and as is usually the case in making reports of that kind unless some special reason presents itself the form in use the previous year is observed, and the clerk that filled in the figures in that report at that time acting under instructions used the figure of $8 per service.

Q. Do you know from what source that figure was obtained?

A. I don't know. I have endeavored to find out without success just who started valuing that property at that price per service for the purposes of the report. I have not been able to do so.

Q. Did it come from the engineering department of the Consolidated Company?

A. I feel sure that it did not, because they repudiate it with so much vehemence.

Q. Did you make this investigation before you testified before the Gas Commission last January?

A. Yes, sir, I did.

Q. Did you explain to them at that time that the figure was a mistake, that you could not explain and could not find where it came from?

A. My recollection is that I testified before the Gas Commission that I was unable to ascertain the source from which that figure was arrived at, who used it first, and I testified the figure was
1240 repudiated by the engineering department, and I believe I testified that in my own estimation it was considerably too low.

Q. Well, it appears that from these figures of $4,827,925.82 for mains and $783,295.30 for services, obtained by using the figures which were given to Mr. Simpson on mains, and from some unknown source on services, 25 per cent. was taken off in making up the tax report, reducing the mains to $3,666,531.38 for mains, and $594,625.01 for services. Now, was that percentage taken off by your instructions?

A. It was taken off before I had anything to do with making up the report. Subsequently, of course, by my instructions it was taken off, my understanding being with respect to that that it recognized the fact that the company was constantly replacing its mains and its services with mains and services of a larger size at a considerable loss. The value of the main or service taken out of the ground or abandoned, as the case might be, being a total loss practically.

Q. Well, did this 25 per cent. then represent any physical deterioration or depreciation of the main or service or merely the——

A. Physical depreciation, no; none whatever.

Q. But the fact that renewals were necessary from time to time?

A. Constantly taking place and particularly so about that time.

Q. Did you understand at the time this report was made or do you now understand that those figures represent the investment of the company in mains and services or the cost to the company?

A. No, decidedly not.

Q. Now the chief item and the only one remaining relates to plant, which appears on the books at $15,755,462.88 and in the fran-

chise tax report of June 30, 1904, at $8,456,595.71. Do you remember now whether Mr. Bradley conferred with you, or were
1241 you advised how that figure was made up?

A. I was unable to recall at the time of the Stevens investigation how the figure was arrived at. Subsequently in conversation with Mr. Bradley my memory was refreshed as to his method of depreciating or writing down the value of that property for the purposes of that tax report.

Q. Did you testify before the Gas Commission what the fact was?

A. Before the Gas Commission I testified to the method employed by him. Before the Stevens Committee I was not able to say more than it was a depreciation that took into account our removal to Astoria, but just how it was taken into account and how the value for the purposes of the report had been arrived at by the chief engineer, Bradley, I at the time was unable to testify.

Q. Did you also testify before the Stevens Committee it did not represent the cost of reproduction?

A. I plainly did so. Neither cost of reproduction nor the cost value.

Q. Now will you state just what method was pursued in obtaining that figure?

Mr. PAGE: I object to that. His method or Bradley's?

Mr. MATHEWSON: No, Bradley's, with him.

Mr. PAGE: "That is objected to. He is stating now the methods that another man used to arrive at a figure as stated by that man to him.

Mr. MATHEWSON: I am going to produce Mr. Bradley; he is ill at the moment. But this has been figured up by Mr. Bradley in the presence of Mr. Carter, as Mr. Bradley called Mr. Carter's attention to it and Mr. Carter recalled after the circumstances were brought to his attention, how it was done by Mr. Bradley, as I under-
1242 stand it. Not something done by Mr. Bradley and brought to his attention, but the figuring was done at the time.

The MASTER: I suppose if Mr. Carter can explain the theory on which the figures were made up which he put in the tax report, it is proper for him to do so, whether he dreamed the method or got it from Mr. Bradley or what not, but I do not think it is competent now for him to testify as to the method Mr. Bradley advised him was the way to value that plant. That I understand to be the Senator's objection.

Q. I will ask you, so far as your knowledge goes, what method was pursued in computing the amount in the tax report?

A. Made up on the theory that the property of the company occupied by its gas plants sold under ordinary circumstances would practically bring nothing more than the value of the land. It is pretty well established by our own experience and by other people who have occasion to sell property of that sort.

Mr. BURR: I move to strike that out.

The MASTER: Strike it out.

Mr. MATHEWSON: Cannot that stand? Isn't that fair to state our experience?

The MASTER: That seems to me superfluous. You asked the theory on which it was arrived at, and he answered.

Exception.

The WITNESS: Our understanding as to the method of valuing property for the purpose of taxation was that it would be valued at the amount it would bring if sold under ordinary circumstances.

Q. You mean in valuing real estate?

A. Real estate, and as we had in contemplation then the re-
1243 moval of our plant to Astoria, had started the construction of a plant there for such replacement, and carrying out that theory the book value of our plant was practically cut in half; assuming of course that the holder plant would remain on Manhattan Island, that the manufacturing plant would be removed, and to half of the book value was added something, I don't recall the figure, representing the possible salvage from the sale or from the employment of some of the apparatus which would be located on the property that we would give up.

Q. A few hundred thousand dollars?

A. A few hundred thousand dollars.

Q. looking at Exhibit 223 in your tax report, the first two items, Real Estate, $11,216,479.71 and plant, $8,456,595.71 appeared in Schedule D, did they not in a single item?

A. $19,673,075.42.

Q. Yes.

A. Yes, sir.

Q. Have you made up a statement as you did to the Gas Commission showing how that would be reached in this particular instance, by the method which you have defined?

A. I have not made up a statement. I can show the method and illustrate it at once.

Q. Well, very good.

A. One-half of the book value of the plant——

Q. In the first place the total of the items is as you say nineteen million and what—just give the amount?

A. $19,673,075.42.

Q. The total of plant and real estate in the tax report?

A. That is the case, yes, sir.

Q. Now, state how that item was made up?

A. One-half of the book value of the plant, that is to say, $15,-755,462.88 would amount to $7,877,731.44. Allowing as the salvage value of the plants there would be scrapped, $578,864.27, would make a total of $8,456,595.71.

Q. And added to that is the amount which appeared in
1244 Exhibit 223, opposite plants in the tax report?

A. Yes, sir, that is the case. And adding to that the book value of the real estate, that is the land and office buildings which are not included in the plant amounting to $11,216,479.71 would give the total value arrived at by that method for the purposes of that report of $19,673,075.42.

Q. So that, generally speaking, you understood your estimate was that you would retain about one-half of the plant in New York?

A. Yes, sir.

Q. And that on removal to Astoria you would scrap about one-half of the plant?

A. Yes, sir.

Q. And you took the value of one-half of the plant at full book value?

A. At full book value.

Q. And added to that a few hundred thousand dollars for scrapping on the other half of the plant?

A. Yes, sir.

Q. And added to that the real estate at book value?

A. Yes, sir.

Q. And the total was the $19,673,075.42 that appears on Schedule D of the tax report?

A. I want to qualify that because this is rather illustrative than dealing with exact figures; because this all occurred in 1902 in connection with the tax report to the local assessors on the second Monday of January, and those figures are simply carried forward from report to report down to the report for 1904, so we are dealing with figures now for 1904 and illustrating how it was done, but this thing was not done for the 1904 report.

Q. I understand, but applying it to the 1904 report, that would be the result?

A. That would be the result, yes, sir.

Q. Now, in the first place, these figures were obtained you say for the 1902 report?

A. Yes, sir.

Q. Was that the first time that mains and services and plants were given a value in the report to the State Board of Tax Commissioners?

1245 A. That was the first year in which any value was given in the reports for that property.

Q. And in the previous reports from 1889 down those spaces were left blank, were they not?

A. Those spaces were left blank in the report.

Q. Do you remember whether your reports have stated and do state that the amounts stated are not the cost of the property?

A. Every report in which these figures have appeared has plainly stated that it was not the cost of the property.

Q. Now, in 1902, then the figures were first used for delivery to the Local Board of Tax Commissioners in New York?

A. Yes, sir.

Q. On the 30th of June, 1902, came due the reports of the State Board of Tax Commissioners?

A. Yes, sir.

Q. Did you pursue the same method in presenting it to them?

A. Used the same figures, with such additions to or such deductions from them as would reflect the book operations, or operation shown by the books, between the second Monday of January and the 30th of June.

Q. Any change in the assets?

A. Yes, sir.

Q. Were the changes large?

A. Inconsiderable.

Q. Was that same method pursued by you up to and including the report made for 1905 to the State Board of Tax Commissioners?

A. Yes, sir.

Q. Without getting any new figures, but simply using the figures you had and applying to them the same methods?

A. That is the case.

Q. You say you proceeded on the theory that the amount to be stated for the taxable value of real estate was the amount for which it would under ordinary circumstances sell and not the cost or other things. From what source was that derived? the provision of what act, if there is any?

A. The Revised Statute. I will tell you just exactly what it was, I have already had occasion to make reference to it in one of
1246 my affidavits (referring to paper). The Charter of the City of New York, Section 889.

Mr. MATHEWSON: That section has already been offered in evidence, as the Master may recall, early in the proceedings.

Q. And was the report made up in this connection under advice of counsel?

A. Always under advice of counsel, and the report always submitted to counsel for approval before it was filed—before it was signed, I should say, also.

Q. Had the company or has the company had any experience as to what plant or apparatus brings when dismantled or scrapped?

A. Yes, sir, it has—if not experience it has had the opportunity to observe, because in the case of our holder at the 18th Street station, which the city took under condemnation proceedings to make room for the marginal street at that point, the holder valued on our books at something over $300,000, was sold as scrap for $10,000.

Q. Do you remember about the plant at 105th Street—was it not?

A. At 111th Street.

Q. At 111th Street?

A. The plant occupied ground which the city desired for a park called Little Italy Park, was condemned by the city and valued at several hundred thousand dollars and sold for a mere nominal sum by the city at auction.

Q. Do you remember how much?

A. Not much. I do not think over fifteen or twenty thousand dollars.

Q. So that in selling real estate on which there is a plant would it be your view that there was any considerable value added by reason of the plant, in addition to the land alone?

A. On the other hand, I doubt, in the case of a great deal of the plants, whether it would not depreciate the value of
1247&1248 the land. It would cost something, especially where the ground is to be used for some other purpose, and it has to be cleared and leveled as in the case of the park. I think the city would have been very glad to have got rid of it at any price.

Q. But whether the method that was pursued in making up these tax reports was legally correct or not, upon which you have stated no opinion, have you correctly stated the method which was pursued in making them up?

A. That is the case, yes.

Q. I want to ask you whether those figures in the tax reports in your understanding would rightfully represent the cost of the property, the investment in the property or the cost of reproduction of the property?

A. I knew very well that they did not, and if I had ever had the faintest suspicion of the use to be made of the figures I should have asked for time to refresh my memory and an opportunity to be heard again. Of course the session was short and I do not think they sat over a few weeks, and it never entered my mind that anyone would attempt to use those figures for the purpose for which they were subsequently used.

Q. You mean as the value of the plant?

A. As the value of the plant.

Q. As an operating plant?

A. Precisely, representing the investment of the company.

Q. Is the change in the different tax reports for 1902 respecting which you have testified, down to 1905, in regard to these various items shown on Exhibit 223, a substantial one or is it very little?

A. Very little.

Adjourned to Monday, August 27, 1906, at 1:30 P. M.

Last Exhibits:

Complainant's 223.
State's N.
City's 34.

1249 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant.

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

Met pursuant to adjournment.

NEW YORK, MONDAY, *August* 27, 1906—1:30 o'clock p. m.

Present: The Master, Mr. Mathewson, Mr. Meade, Mr. Page, Mr. Burr.

Appearance.

Gustavus T. Kirby, Esq. (representing Mr. Gans).

1250 Mr. MATHEWSON: I would like to call attention to a slight correction at page 1218 of the testimony. The word "supposedly" should be "substantially."

Mr. BURR: I might say that I am informed by the stenographer that he received on Saturday typewritten copies of the franchises, permits, etc., which have been offered in evidence, and that he will be unable to get them out so that we can get copies of them for several days. I would like to have it understood on the record that when the franchises are printed, and all the papers pertaining to the same, we may then have a right to make such further objections and such motions as we may deem advisable.

The MASTER: That was understood. Mr. Gans raised that question.

Mr. BURR: I know; I did also, but the delay being so great I thought I would like to make sure of it.

GEORGE S. GREENE, JR., called as a witness on behalf of the complainant, being duly sworn, testified as follows:

By Mr. MATHEWSON:

Q. Where do you reside.
A. 534 Fifth Avenue.
Q. New York City?
A. New York City.
Q. What is your business?
A. Civil Engineer.
Q. How long have you been a civil engineer?
A. Some forty years.

Q. Have you ever been connected with the Dock Department of the City of New York?

A. Yes.

Q. In what capacity and for how long?

A. I was Engineer in Chief of the Department of Docks from 1875 to January, 1898.

Q. What is your firm in New York, your engineering firm?

A. Greene & Greene.

1251 Q. Are you the senior member of that firm?

A. I am.

Q. As Chief Engineer of the Dock Department what were your duties?

A. I had charge of all the construction and repairs, virtually; practically of all the work of the Department, and the supervision of all work done on the water front by private parties, and such other duties as the Commissioners called upon me to perform.

Q. Were you ever called upon to advise with the Commissioners in fixing rentals and upset prices of dock property and water front property?

A. Frequently, if not almost constantly.

Q. What was the custom of the Department while you were there in reference to that?

A. They had the sale of the right to collect wharfage, what you call leases of the pier or bulkhead annually, and sometimes more frequently than once a year. In all those cases I was called upon by the Commissioners to advise and consult with them with regard to the proper rentals; and also in the cases where piers were not leased at public auction, but by agreement, I was called into consultation with the Commissioners with regard to the fixing of the rentals.

Q. In this connection did you keep yourself familiar with the rental values of water front property on the island of Manhattan?

A. Yes.

Q. Are you able to state the value of the water front property, of the bulkheads, the piers and the land under water?

Mr. PAGE: I object to that on the ground that the witness has not been shown to have a present knowledge of values.

The MASTER: Objection overruled.

Exception taken by Mr. Page.

A. Yes, sir.

1252 Q. Have you been called upon to give opinions in judicial procedings?

A. In regard to value of water front property, yes.

Q. Have you ever been retained to testify in any judicial proceeding in behalf of the defendant, the City of New York?

A. Yes, sir.

Mr. BURR: As to the values of this kind of property?

Mr. MATHEWSON: No, not especially as to values. I asked him if he has ever been retained to testify and give expert opinion in any judicial proceeding, and he says he has.

Q. Referring to Complainant's Exhibit 48, are you familiar with

the water front at Tompkins Street, between 14th and 16th Streets? Do you know the locality?

A. Yes, sir.

Q. Taking the strip of land under water between Tompkins Street and the bulkhead lines, between East 14th Street and East 16th Street, which has been testified to as about 450 feet in length, excluding 15th Street, and of an average width of about 70 feet, have you computed how many square feet there are in that area?

A. Yes, sir; I make it 30,318 square feet.

Q. What is the length of the two bulkheads there?

A. Combined, 447.4 feet.

Q. What in your judgment is the value of the bulkhead rights between 14th and 16th Streets, being of the footage you have mentioned, excluding 15th Street?

A. The total value, $156,590.

Q. What valuation per foot does that mean?

A. $350 per foot.

Q. Now, taking the land under water, 30,318 square feet, what is the valuation of that per square foot?

A. $4 per square foot.

Q. Making for the 30,318 feet under water at how much?

A. $125,272.

1253 Q. Taking the bulkheads to which you have testified, and the land under water, combined, at that point between 14th and 16th Streets, what is the value of both, the total value, by your testimony?

A. $281,862.

Q. Taking next the bulkhead rights between 16th and 18th Streets and the North River, excluding 17th Street, as appearing upon complainant's Exhibit 49; state what value in your opinion attaches to those bulkheads, at the time they were condemned by the city recently.

Mr. PAGE: The same objection.

The MASTER: The same ruling and exception.

A. Do you wish it per foot or the gross amount?

Q. Per lineal foot?

A. $840 per lineal foot.

Q. And how many feet are there in those bulkheads?

A. In each of them 188.75; in the two of them 377½ feet.

Q. And what in your judgment is the value of the bulkhead rights?

A. $317,100.

Q. I next direct your attention to the property between 41st and 42nd Streets and the North River, as shown on Exhibit No. 48. There is a pier at the North River end of that property, is there not?

A. Yes.

Q. Taking the bulkhead rights at that point, what is the length of the bulkhead line?

A. 197½ feet.

Q. And what in your judgment is the value of the bulkhead rights per lineal foot, and the total for that footage?

A. $750 per foot; $148,125.

Q. What is your judgment as to the value of the pier?

A. $240,000.

Q. And does that include not only the land actually covered by the pier, but the use which is made of the water on either side of the pier to the street line?

A. Yes.

1254 Q. That is, the berths for ships or boats?

A. On both sides of the pier there is a berth for a vessel.

Q. And your valuation includes that pier with whatever rights attach on either side to the street line?

A. Either side of the pier.

Q. What do you state to be the value of that pier, so considered?

A. $240,000.

Q. Does this valuation of $240,000 include the land under water in shore of the established bulkhead line?

A. No.

Q. What is the total valuation of the bulkhead rights and pier as you have stated them, combined, between 41st and 42d streets?

A. $388,125.00.

Q. Will you consider next the parcels appearing at page 6 of Exhibit 48, being the bulkhead rights and land under water between 44th Street and 46th Street, with 45th Street out, on the North River. What is the length of the bulkhead in each of the blocks, 44th to 45th and 45th to 46th?

A. 200 feet 10 inches.

Q. And what in your opinion is the value of the bulkheads at that point per lineal foot?

A. $750.00.

Q. That would make a valuation for each bulkhead of how much?

A. $150,622.50.

Q. And for the two bulkheads together?

A. $301,245.00.

Q. How much land under water is there alongside of that bulkhead line?

A. For the two blocks 14,756 square feet.

Q. The dimensions of the land under water in each case being what?

A. 70 feet x 200 feet 10 inches.

Q. And what is the value in your judgment per square foot of the land under water to which you have testified?

A. $5.00 per square foot.

Q. What valuation would that produce for the land under water?

A. For each block $73,780.50.

Q. And for the two combined?

A. $147,561.00.

1255 Q. Taking the bulkhead rights and the land under water together between 44th and 46th Streets, what would be the total valuation?

A. $448,806.00.

Q. That does not include, does it, any additional land under water outside of the established bulkhead line?

A. No, it does not.

Q. Referring to page 10 of Exhibit 48, bulkhead and land under water east of Pleasant Avenue between 110th and 111th Streets, what is the length of the bulkhead line at that point?

A. 212 feet.

Q. What in your judgment is the value of the bulkhead per lineal foot?

A. $250 per foot.

Q. And what is the valuation in dollars for the 212 feet?

A. $53,000.

Q. How much land under water is there between the bulkheads and Pleasant Avenue?

A. About 9,400 square feet.

Q. And what is the value of the land under water per square foot?

A. $3.

Q. What value would that produce for the entire 9,400 square feet?

A. $28,200.

Q. And what is your total value of bulkhead and land under water combined between Pleasant Avenue and the bulkhead line, 110th and 111th Streets?

A. $81,200.

Q. That I think includes all the bulkheads and land under water which you have valued?

A. Yes.

Q. Are you familiar with those properties and locations and each of them?

A. Yes.

Q. Will you give me the total valuation of bulkheads and land under water to which you have now testified on this hearing?

A. $1,517,093.

Q. Has water front property been rising or falling in value in the City of New York for the last few years?

A. Rising.

Q. And do the valuations which you have stated now represent the present value?

A. They represent the present values, yes, sir.

1256 Cross-examination by Mr. BURR:

Q. Have you ever bought or sold any bulkhead property?

A. No, sir.

Q. Your experience has been confined solely to leasing bulkhead property or fixing the rentals on such property?

A. Well, I have some knowledge of the very few sales there are of water front property.

Q. I am not asking you just now about knowledge; I am asking you what your experience has been in the sale or purchase of bulkhead property; I understood you to say that you have had none?

A. I have had none.

Q. Have you had any experience in renting bulkhead property?

A. In the Dock Department.

Q. Any outside of that?

A. Outside of that, no, sir.

Q. And your experience as to renting bulkhead property was confined to the time when you were Chief Engineer of the Dock Department, between 1875 and 1898?

A. My actual experience—meaning by that when I participated in the consultations and discussions which fixed these rental values—was confined to my experience in the Dock Department.

Q. Do you know who owns the bulkhead property that you have been testifying regarding?

A. I assume that the Consolidated Gas Company owns it.

Q. And you base your opinion upon the assumption that the Consolidated Gas Company owns these several pieces of property?

A. Yes.

Q. Have you made the measurements yourself to which you have testified, or have you received the dimensions from somebody else?

A. I have taken them from the Dock Department largely, chiefly.

Q. I understood you to say that you had testified in some judicial proceeding on behalf of the City of New York. Have you
1257 ever testified for the City of New York as to the value of bulkhead property.

A. Not that I remember.

Q. How long since have you testified on behalf of the City of New York in any judicial proceedings for any purpose?

A. Last spring, three or four months ago.

Q. And what was that proceeding?

A. It was the condemnation and acquisition of some property in the Borough of The Bronx for a park.

Q. Have you ever testified as an expert heretofore for any person as to the value of bulkhead property in the City of New York?

A. In the City of New York? Yes.

Q. When did you so testify?

A. Well, I have done so a number of times in the past five or six years.

Q. Can you tell me what property you have been called upon to give an expert opinion on, bulkhead property I mean, and land under water.

A. There was one piece up about 80th Street in front of the Riverside Park; there was a bulkhead and pier, 19th and 20th Streets, on the East River, there were certain pier rights at the foot of 43rd Street, North River; Pier old number 36 on the East River; Piers 16 and 17 and the bulkheads between them on the East River; Piers 19 and 20 on the East River; Piers 9 and 10 on the East River; Piers 1 and 2 on the East River. There may be some others that I have omitted, because I haven't my books here to remind me.

Q. Now, the property between 19th and 20th Streets was on the East River, was it?

A. Yes, a bulkhead and a pier, 19th Street and East River.

Q. That was on the East River?

A. Yes, sir.

Q. What was the nature of that proceeding?

A. A condemnation proceeding.
Q. By the city?
A. Yes, sir.

Q. And you were testifying on behalf of those who claimed
1258 the rights in the pier and in the bulkhead as against the city?
A. Yes, sir.

Q. And did you give a valuation of those rights including the bulkhead property?
A. Yes, sir.
Q. Land under water?
A. There was not much question of land under water; it was pier and bulkhead.
Q. Do you know what you testified the value of that property to be per lineal foot, bulkhead property?
A. Yes.
Q. How much was it?
A. $650.00.
Q. How much did the Commission award?
A. Only $300.00.
Q. Now with regard to the bulkhead at Pier 43—or Forty-third Street, is it?
A. Forty-third Street. That was a case of certain pier rights.
Q. That did not involve bulkhead rights, did it?
A. No, the bulkhead did not come in there.
Q. Nor did it involve land under water?
A. No, it was a pier right, the right to build a pier.
Q. Well, we won't waste any time on that. Pier 36, East River; is that Pier 36?
A. Old Pier 36, East River.
Q. Was that pier rights or bulkhead property?
A. Both bulkhead and pier property. If you like, I will recall an additional case, a bulkhead right that I testified in regard to, and that is between 16th and 17th Streets, North River, and between 17th and 18th Streets and North River, also between 19th and 20th Streets, and 22nd and 23rd Streets, North River.
Q. Were these properties all embraced in one proceeding which you have just mentioned, from 16th to 23rd Street?
A. Yes, sir.
Q. And what was the nature of that proceeding?
A. Acquisition, condemnation by the city of the private rights.

Q. Of bulkheads?
1259 A. Of bulkheads. In the proceeding also they took upland, but I had nothing to do with that.

Q. Do you remember what you testified in that proceeding was the value of bulkhead property between 16th and 17th Street, North River?
A. $840 a foot.
Q. And between 17th and 18th Streets?
A. $840 a foot.
Q. And between 19th and 20th Streets?
A. I have forgotten.

Q. And between 22nd and 23rd Streets?
A. $900.
Q. Do you know what the Commission awarded per lineal foot?
A. For 22nd and 23rd Streets? $900.
Q. Between 16th and 17th Streets?
A. I don't know that they have made an award. I have not heard.
Q. Between 17th and 18th Streets?
A. I have not heard that they have made an award.
Q. Between 19th and 20th Streets?
A. Nor have I heard that.
Q. And between 22nd and 23rd Streets?
A. I have heard there they gave $900 per foot.

By Mr. MATHEWSON:

Q. What did you say your testimony was between 22nd and 23rd Streets?
A. $900.

By Mr. BURR:

Q. What was the property embraced in the proceeding between Piers 2 and 3, East River?
A. That is on trial now. It is the whole of Pier 3 and the half of Pier 2 as it formerly existed, the bulkhead between Piers 2 and 3 and 100 feet easterly of Pier 3.
Q. What was the nature of that proceeding?
1260 A. Condemnation by the city, acquisition of private property.
Q. Did you testify as to the value of the bulkhead property there?
A. Not yet.
Q. Between Piers 9 and 10, East River?
A. 9 and 10 I have testified regarding.
Q. What did you give the value of the bulkhead property there to be?
A. $450 for part of the bulkhead and I think, as near as I can recollect, $350 for another part.
Q. And has the Commission made the award there yet?
A. Not that I know of.
Q. And the proceeding to acquire the property between 19th and 20th Streets, East River?
A. Piers 19 and 20?
Q. Has that been concluded as yet?
A. I am not aware, sir, but I think not.
Q. What did you testify the value of the bulkhead property was there?
A. I don't recollect.
Q. Pier 16, East River, has that proceeding been concluded?
A. No, 16th and 17th were together.
Q. And pier 36?
A. And the bulkhead between them.
Q. And Pier 36, East River, has that proceeding been concluded?
A. No, sir.

Q. You have testified that the proceeding at Pier 43, North River, has been concluded?

A. Yes, that proceeding was completed.

Q. Your whole and sole experience, as far as piers and bulkheads were concerned, for the time you were chief engineer, was confined to the leasing of the same, the fixing of rentals by the Dock Department, to those who were desirous of leasing the property?

A. Yes, I think if I understand your question. That is, we did not sell any property.

Q. I say your sole experience with regard to that property at the time you were chief engineer of the department was con-

1261 fined to the rental of such property?

A. Yes.

Q. And the fixing of rates of rental by the Dock Department?

A. Yes, sir.

Q. The property at Tompkins Street, between 14th and 16th Streets, where did you take the measurement of that property from?

A. I took those by calculation from the Dock Department map.

Q. You say the length of the two bulkheads is 447 feet 4 inches?

A. 447.4 inches.

Q. And the land under water is 30,318 square feet?

A. 30,318 square feet I make it.

Q. When did you make an examination for the purpose of ascertaining the dimensions of that property?

A. Why, I don't know what day; within three or four days past.

Q. Have you talked with Mr. Wheelock who has testified here as an expert for the complainant, as to the values of real estate and bulkhead properties with regard to such valuation?

A. He showed me his valuation and he asked to see mine, and we differed somewhat.

Q. Did you take the measurements from him?

A. No.

Q. Did you embrace in this measurement Tompkins Street itself?

A. No, the measurement of the land under water you refer to?

Q. Yes.

A. No, sir.

Q. Or any part of it?

A. Oh, no. It is land under water, between the existing bulkhead and the established bulkhead line.

Q. What is the physical condition of that bulkhead?

A. Fair.

Q. Is it complete?

A. Complete? Why, yes, it was in use two or three days ago.

Q. I mean is it completely built up? Is the bulkhead completely built up?

A. Do you mean to the full established grade?

1262 Q. Yes.

A. I did not notice. I did not take cognizance of that.

Q. Is there any part of it broken down?

A. Not that I saw.

Q. Is there any part of it being presently repaired?

A. I didn't see it.

Q. But you are willing to testify that the physical condition of that pier is good?

A. I said it was fair.

Mr. MATHEWSON: He has not testified about the pier.

Q. I mean of the bulkhead.

A. Fair; in use and usable.

Q. What considerations did you take into mind when you fixed the valuation per foot there of $350 per lineal foot?

A. I took it into consideration that a bulkhead in that locality, in that vicinity, *per se,* that is without any upland opposite it, in the same ownership, is worth about $250 per *feet*, and that on account of the upland and the bulkhead being in the same ownership it was worth $100 a foot more, making $350.

Q. Have you any knowledge of sales or purchases of bulkhead property in that neighborhood?

A. Not except under condemnation proceedings.

Q. What did you base your valuation of $4 per square foot of that land under water upon?

A. Because land under water is rented, leased for platforms and things of that kind at various prices, sometimes downtown and on the North River at 25 cents per square foot per annum, and further uptown at less prices, and my judgment is that land under water at that locality could be leased for 20 cents per square foot per annum, which, capitalized at 5 per cent., makes $4 for the value.

Q. Have you any knowledge of any sales or purchases of land under water at that rate in that neighborhood?

1263 A. No, I don't recollect any land under water.

Q. The bulkhead property at 18th Street, North River, did you take the measurement of this property yourself or have it done for you or did you take a measurement from someone else?

A. I took it from the Dock Department records.

Q. You place a valuation of $377.50 per lineal foot on the bulkhead property here. Upon what basis did you arrive at that figure?

A. Did I say $377 per lineal foot?

Q. Oh, excuse me, $840.

A. $840, yes. Well, that was based beginning with $500 per foot for bulkheads along that part of the North River, some of them above it and some of them below, which had been fixed some eight or ten years before by agreement between the owners and the dock department and by stipulation between counsel of opposite sides, and also confirmed by decisions in the courts.

Mr. BURR: I move to strike that out.

Mr. MATHEWSON: I think that is responsive.

The MASTER: I will let it stand.

Mr. BURR: Exception.

The WITNESS (continuing): Then the property, inland property, the lots directly opposite these bulkheads, were in the same ownership as the bulkhead rights and I added $100 per foot for that, that

made $600. Then an examination of water front properties, leases in that vicinity, showed in the past ten years a very great increase, a very decided increase, a very large percentage, and of that large increased percentage I took forty per cent. as applicable to these bulkheads, and added forty per cent. to the $600, which made $840.

Q. What was this stipulation or agreement that you speak of?

A. In the condemnation proceedings for the acquisition
1264 of the property, water front and upland both, between West Eleventh Street and the Gansevoort Street market, the counsel for the owners and the counsel for the city stipulated that the price to be paid for the bulkheads should be $500 per foot.

Q. Were you a witness in that proceeding?

A. No.

Q. From what is your knowledge as to that stipulation derived?

A. It comes to me from the counsel on each side, Mr. Olendorff and Mr. Harris.

Q. Do you know how much the claimant asked in that proceeding?

Objected to as immaterial.

Question allowed.

Exception.

A. I do not.

Q. Do you regard the cond-tions existing between Sxiteenth and Eighteenth Streets on the North River the same as existed at that time between West Fifteenth Street and Gansevoort Street?

A. West Eleventh?

Q. West Eleventh and Gansevoort property.

A. That they were the same as Sixteenth and Seventeenth?

Q. Yes.

A. Not quite the same, no. But the same prices had been fixed for bulkhead rights at $500 by agreement, had been fixed for similar property close by Sixteenth and Seventeenth Streets.

Q. Which property was it?

Witness picks up a book.

Q. You don't recall without consulting a book, do you?

A. No. There was a sale by agreement, there, it was a good while ago and I can't recall it without reference to the book.

Q. What is the book you are referring to?

1265 A. The book is the report of the Department of Docks for 1903, which contains a list of wharf property acquired by the Department of Docks down to 1903. Reading from that book, between West Twenty-third and West Twenty-fourth Street, the bulkhead 202 feet 6 inches in length, acquired December 14, 1892, by agreement from Clements C. Cassimer and Catharine T. Moore, price per foot $500.

Q. What was the year?

A. 1892.

Q. And you give the number of feet in each bulkhead at that point at 188.75?

A. Yes, sir.

Q. What is the physical condition of that property?
A. Those bulkheads?
Q. Yes.
A. They are all gone to-day.

By Mr. MATHEWSON:

Q. At the time you made your estimate?
A. They were in process of destruction at that time in 1903.

By Mr. BURR:

Q. You place the total value there at $317,100, is that right?
A. Yes, sir; for the two.
Q. Now, take the property at 41st and 42d Streets, the length of bulkhead at this point you say is 197½ feet?
A. Yes, sir.
Q. And you give a valuation of $750 per lineal foot?
A. Yes, sir.
Q. Upon what do you base that valuation?
A. Upon the $500 basis for any bulkhead on the outside of a marginal street, and an addition for being in the same ownership with the land inshore, directly inshore of the bulkhead, $250 per foot. That addition includes the increase of value since the $500 rate was established, as far back as 1892 and 1895.

Q. Do you know what bulkhead property has sold in that
1266 neighborhood within the past two years at, per lineal foot?
A. No, not in that immediate neighborhood.

Q. And you arrived at your figure by taking the $500 fixed in 1892 for property at 15th and 16th Streets——
A. (Interrupting.) Well, other places also.
Q. And you add to that $250, is that right?
A. I will continue to the point. There were a number of places along there where the bulkhead rights were sold or condemned or acquired for $500 a foot.
Q. You have no knowledge yourself of those transactions other than the information you get from this report of the Dock Department in 1903?
A. Well, some of them I saw in the department, and knew about them in that way. I saw the papers certified to by the corporation counsel.
Q. Why do you put an addition of $250 to the $500 instead of $150?
A. Instead of $150?
Q. Yes.
A. The $100 I gave where there is a street between the bulkhead and the upland properties, both of which are in the same ownership. In this case the upland extends directly, or the structure extends directly to the bulkhead line, substantially. There is, as you see on the map, a little place, a small portion of it, which is not covered by the structure.
Q. How large it that place not covered by the structure?
A. Well, it is small. I should think it was, my recollection of it might be sixty feet by sixty feet or thereabouts.

Q. Sixty by sixty?

A. Thereabouts, but I included the value of all that land under water inside of the bulkhead line in the valuation of the bulkhead.

Q. In other words, if that land were separated from the bulkhead property you would have awarded $100 in adition to the $500, but being connected and running out to the bulkhead you make
1267 an allowance of $250?

A. Partly on account of that and partly on account of the increase in value that has taken place on North River water front property since the old price of $500 was established.

Q. Have you made any allowance for the right of way which is now being exercised or used by a company other than the Consolidated?

A. Oh, no, that is a mere temporary thing.

Q. Who told you so?

A. Down at the Dock Department. They made an agreement there in order to build the 41st Street pier and that is a part of it, that they can have for a limited time, I have forgotten dates, the right of way across that property there.

Q. Do you know whether the complainant receives any rental from that right of way or not?

A. I don't know.

Q. If it received rental would that enter into your consideration of the valuation?

A. Well it might if it was consequential.

Q. Do you know what use this upland is being put to now?

A. Gas manufacture.

Q. And what use the bulkhead is being put to?

A. The same thing, used in the gas manufacture.

Q. In what particular way?

A. In landing their material and handling their stock.

Q. So that it affords them, this bulkhead you believe affords them an opportunity to deliver their supplies and material there without any trouble of taking it into yards or plants or workshops there?

A. Well, they have to cross this right of way during this temporary existence of this right of way; at other times they would go directly across, but a large amount of their coal, almost all their coal I think, comes right over that bulkhead now and is taken into the upland property where they manufacture the gas.

Q. So that it becomes in your opinion valuable to the com-
1268 pany because it saves them cartage, in other words?

A. Yes, it saves them a large amount in the handling of their material.

Q. And they are able to deliver their coal at tidewater at the end of this bulkhead?

A. They receive their coal——

Q. I mean receive their coal?

A. Yes.

Q. They are able to have their coal delivered there at tidewater?

A. On the pier. They use the bulkheads for getting rid of their refuse material.

Q. Let me show you Exhibit 48 and call your attention to the

map, on page 5, of this property regarding which you are now testifying, and let me ask you what these lines here indicate and this figure 250 (indicating).

A. The first line you refer to is the established bulkhead line, the line interior of that established bulkhead line is the westerly line of 12th Avenue, 250 feet inshore of the established bulkhead line.

Q. That is a proposed street, is it, this part (indicating)?

A. I don't know whether that is intended for a proposed street or not. Those lines—that one is marked "bulkhead line," that is the established bulkhead line. 250 outside of that is the westerly line of 12th Avenue, a matter of fact, because I know that the established bulkhead line—no, excuse me, it is 150 feet west; 250 feet is the easterly side of 12th Avenue.

Q. Well, doesn't that marginal street run through the property then?

A. A marginal street is laid out on the map to run through the property on the new plan, as it is called.

Q. If a street ran through there, then the property would not be so valuable, would it?

A. What street? 12th Avenue?

Q. Yes, this marginal street.

A. It would diminish it somewhat, not a great deal.

Q. Well you have added $250 because of the increase in valuation and of the conjunctivity of the land and bulkhead?

A. Yes.

Q. What difference would be made in your estimation of value if a street ran through there, if that was physically cut through there this moment?

A. Well there would be outside of that street 150 feet of land.

By Mr. MATHEWSON:

Q. Next to the bulkhead line?

A. Between the street and the established bulkhead line.

By Mr. BURR:

Q. What valuation do you place upon the item of use of water upon either side of the pier?

A. Well, that goes with the pier.

Q. Well, I know, but you testified that in arriving at your figure you took into consideration the use which it is put or may be put to of either side of the pier?

A. Well, that goes always with the pier and is always with the pier. The pier is of no use except the vessels are put on each side of it.

Q. So you did not place any particular valuation on that, other than the advantage of having a place to deliver material at?

A. The general value of the pier.

Q. The land under water inshore of the bulkhead line, what valuation did you put upon that?

A. I included it all in the valuation of the bulkhead.

Q. But did you place any particular value on the land under water in arriving at the general value?

A. I thought that as it was so nearly filled in and had so many structures upon it, that the fairest way would be to consider it simply as bulkhead and not as land.

Q. So that you wish to be understood as saying that the land under water inshore of the bulkhead line did not enter into
1270 or form any part of the general amount of $750 at which you have arrived?

A. I have endeavored to say that I included whatever value it had in the valuation of the bulkhead.

Q. Yes, I know you have in a general way. What I am trying to arrive at is what special value in dollars and cents you gave that land under water inshore of the bulkhead line?

A. I didn't give it any special value?

Q. So in an indefinite way it is embraced in the $750 valuation?

A. Including the whole thing.

Q. 44th and 46th Streets is the next bulkhead regarding which you have testified. That I understood Mr. Mathewson to say did not embrace 45th Street. Is that right, leaving 45th Street out?

A. Yes.

Q. Now, what is the length of the bulkhead there between 44th and 45th Street?

A. 200 feet 10 inches.

Q. And are those dimensions the same in the bulkhead between 45th and 46th Streets?

A. Yes, sir.

Q. You have given a valuation there per lineal foot of $750?

A. Yes, sir.

Q. How did you arrive at that figure Mr. Greene?

A. On a similar basis, the old $500 rate and the addition for the increased value of wharf property on the North River and the fact that the ownership of the land up to the edge of the bulkhead is in the same party as the ownership of the bulkhead rights.

Q. That is, you claim in your valuation that the property of this company runs 700 feet on 44th Street and taking in the 250 feet additional down to the bulkhead line as appears here on the map, Exhibit 48, page 6 (handing map to witness)?

A. That is the upland, with which I have nothing to do.

Q. Point out where you commenced to measure the bulkheads, from what point?

A. From here, 44th Street, north side of 44th Street, to
1271 the southerly side of 45th Street, and from the northerly side of 45th Street to the southerly side of 46th Street (indicating).

Mr. PAGE: I suggest that "From here" does not appear on the stenographer's minutes.

Q. Just describe that again will you, Mr. Greene, the point from which you measured?

A. I measured the bulkhead from the northerly side of 44th Street to the southerly side of 45th Street and from the northerly side of 45th street to the southerly side of 46th Street.

Mr. PAGE: Along what line?

The WITNESS: The existing line of bulkheads.

Q. Well, there is a line on this map marked bulkhead line?

A. Yes.

Q. You have been figuring on a line which is east of that?

A. Yes, sir.

Q. It is that line from which you have been figuring near the figure 250 feet, is that what you claim to be the existing bulkhead line?

A. No, the line marked here bulkhead line is the established bulkhead line. The line without a designation on this map is the existing bulkhead as built.

By Mr. PAGE:

Q. That is shown 185 feet 10 inches?

A. It is shown there as 185 feet 10 inches.

Q. Upon the colored portion of the map on page 6?

A. Yes.

By Mr. BURR:

Q. Now, how did you arrive at the number of square feet of land under water inside the bulkhead line?

A. I took the distance between the established bulkhead
1272 line and the existing bulkhead line as 70 feet and multiplied it by the distance between the streets 200 feet 10 inches, which gave me 14,756 square feet for each block.

Q. Did you take that 70 feet from actual measurement or did you take that from the Dock Department?

A. Took it from the Dock Department.

Q. From what particular map or document in the Dock Department did you take that measurement?

A. One of their maps, called the standard map, on a scale of fifty feet to the inch.

Q. As it exists to-day, purporting to give the measurement or configuration of this land, as it exists to-day?

A. Yes, sir.

Q. I understood you to say in your direct testimony that the dimensions of the plot were 70 x 200 feet 10 inches, is that right?

A. Yes, for the land under water.

Q. Now, you give a valuation there of five dollars a square foot?

A. Yes, sir.

Q. On what basis did you arrive at that figure?

A. Because land under water on the North River will rent for platform purposes or things of that kind for twenty-five cents per square foot per annum which capitalized at five per cent. gives five dollars.

Q. What do you mean by platform purposes?

A. Sometimes people wish an extension to their bulkheads or to their piers and it is commonly called a platform; it is really a wharf as much as a pier or a bulkhead.

Q. And did you give the same valuation to the platform so-called as you would to the bulkhead proper?

A. Oh, if the platform has a right of wharfage on it it would not differ much from the bulkhead under the same conditions.

Q. Do you consider it as a platform pure and simple, or an extension of the bulkhead?

1273 A. It would be in any case, all platforms would be virtually extensions to piers and bulkheads.

Q. Do I understand you to mean that one having a bulkhead and having a platform has the same right over the platform as he has over the bulkhead?

A. If he controls the bulkhead or the land immediately inshore of the bulkhead, if he owns that he would have the same right because no one could go to his platform or to and from it and from the shore without crossing over his land, for which he could demand compensation or which he could forbid.

Q. Then in your estimation what he may do on the bulkhead he may do on the platform?

A. Yes.

Q. Whatever structures he may put up on the bulkhead he may put on the platform?

A. If he controls the bulkhead and the land in shore.

Q. Now, have you any knowledge of any actual transactions in this neighborhood which justify you in arriving at this valuation?

A. There are not many in that neighborhood; there are further downtown where property is more valuable.

Q. About how far downtown?

A. I will refer to the book and give you some.

Q. You have no knowledge personally of such transactions and you derive your knowledge from consultation or reference to this book?

A. Not altogether, because some of the platforms were built under permits granted while I was in the department, and in that case the work has to be done under my supervision. (Witness refers to book.) Now, I beg leave to say in explanation that I know about these general rates of compensation for the use of land under water. I cannot recollect each individual case without reference to the book. Turning to the book here, the rent roll of the department, the land under water for platform southerly about 66 feet

1274 from west 40th Street, 924 square feet, $231 per annum, which is, if you please, exactly 25 cents per square foot. And that platform was built under a resolution of the 4th of February, 1887, renewed on June 24th, 1898. In 1887 I was in the department.

Q. In arriving at this valuation of $750 per lineal foot of the bulkhead property you have concluded that that was a proper valuation in view of the connection of the bulkhead with the upland and the fact that the Consolidated Gas Company in your opinion owned the bulkhead property and used it for its own purposes?

A. Yes.

Q. Do you know what particular purpose it uses the bulkhead for at that point?

A. One of them they were receiving coal and the other one they were shipping refuse.

Q. Do you know what particular use the upland at that point is put to between 45th and 46th Streets by the Consolidated Gas Company?

A. I saw buildings there but I don't know what they were doing in them.

Q. What is the physical condition of the bulkheads at that point, Mr. Greene?

A. Well, they are in pretty good condition.

Q. Could you say from your observation and experience what is the earning power per lineal foot of that bulkhead property at that point?

A. Not directly because it would have a special value to the owners of the upland property, and I don't know of any case where it has been considered that they would separate it, so to speak, of their will or own volition.

Q. And the same I suppose applies to the other bulkhead property in that connection regarding which you have testified?

A. Yes.

Q. You say regarding this property at 44th and 46th Streets, that the 14,756 square feet of land under water does not
1275 include the land under water outside of the bulkhead, is that true?

A. I beg your pardon, I did not quite hear what you said. Is this in relation to 44th and 46th Streets?

Q. (Question repeated.)

A. Not outside the existing bulkhead—Oh, land under water, not outside the established bulkhead line.

Q. That is not outside the line marked bulkhead line on Exhibit 48, page 6?

A. Not outside this line marked bulkhead line.

Q. You say you capitalized the 25 cents per square foot at 5½ per cent.?

A. Five per cent.

Q. Why do you capitalize it at 5 per cent.?

A. Well, a matter of custom and a matter of somewhere near right; between 4 and 5. I use 4½, sometimes 5.

Q. You regard that as a fair return on the investment?

A. I think it would be fair in this particular case.

Q. Now, the Pleasant Avenue bulkhead property you valued that at $250 per lineal foot. Have you any special reason for valuing that at that figure?

A. The general price and rental of bulkheads in that vicinity would indicate that it is worth about $150 a foot, and I add $100 because that bulkhead property is in the same ownership as the upland.

Q. In arriving at the valuation of this property per lineal foot you take into consideration solely the rental value of bulkhead property in the immediate neighborhood, is that right?

A. Well, it is a little broader than that; bulkhead property above and below. The value of the property also above and below.

Q. Have you any personal knowledge of any purchases or sales

of bulkhead property immediately below or immediately above that bulkhead property located between 110th and 111th Streets?

A. No, not immediately above or below.

1276 Q. Tell me what the pier at 113th Street rents for.

A. The pier at 113th Street?

Q. Yes.

Mr. MATHEWSON: East River or North River?

Mr. BURR: East River.

Mr. MATHEWSON: That is not part of the property that is at issue here.

Mr. BURR: I know it.

Q. Well, you don't know, do you?

A. I do not recollect.

Q. Tell me what the property at the foot of 109th Street, East River, rents for, bulkhead property?

A. I don't recollect. There is some wharfage collected there, very good wharfage.

Q. Well, what particular property above and below 110th and 111th Streets do you refer to in saying that the rentals of such property entered into your consideration in fixing this valuation?

A. I did not take a particular property. It is not directly comparable and I generalized only and fixed it by judgment and estimation from my knowledge and experience in such matters.

Q. Without regard to the rentals or sales or purchases of such property in that neighborhood?

A. Those came into consideration.

Q. That is what you have said, and I am trying to ascertain what rentals you referred to in fixing the valuation at this particular point?

A. Well, I have not a list of them here, I have general information in regard to them.

Q. No particular information?

A. No, not that I can give now.

Q. So that when you say you based this valuation upon rentals of property in that neighborhood, you have no particular rentals in mind?

A. Not in mind, no, not specially.

1277 Q. What is the length of that bulkhead?

A. 212 feet.

Q. You got that dimension from the Dock Department?

A. Dock Department records, yes, sir.

Q. Now, is it not true with regard to the valuations that you have placed upon all the bulkhead property regarding which you have testified, that you have not had in mind any particular sales or purchases or particular rentals of property in that neighborhood, but have fixed arbitrarily a figure which in your judgment suits the situation?

A. Well, I do not always make a direct comparison with some specific piece of property. As I explained in regard to the bulkheads on the North River there are a number of them where the price was

fixed at $500 a foot, and I take such a case as that as a foundation to build upon.

Q. And you testified that in your opinion the land under water at this particular point, Pleasant Avenue, between 110th and 111th Streets, is fairly valued at $3 per square foot?

A. I do.

Q. What consideration entered into your mind in forming that opinion?

A. That it would rent for 15 cents per square foot per annum, which capitalized at 5 per cent. would amount to $3.

Q. And yet you state that it would rent at 15 cents per square foot without any knowledge of any real or actual rentals of property either above or below that neighborhood at that price?

A. No, I did not mean to say that. There is a piece of similar land under water further up than that that rents for 25 cents per square foot per annum, up in the Harlem River, farther up where things are generally cheaper than they are at 110th Street.

Mr. BURR: I move to strike that out. I have not asked
1278 with regard to things being generally cheaper. If you want to go into that, I can, but I have not asked about that.

The MASTER: Strike out the last sentence.

Q. Who owns the bulkhead property at this point, the Consolidated Gas Company?

A. I think so, I assumed that that was the case.

Q. And you assumed that the Consolidated Gas Company owned the bulkheads in arriving at the valuation which you have given?

A. Yes.

Mr. BURR: I submit, Mr. Master, that this man is not qualified as an expert to testify regarding bulkhead properties or their value or the value of land under water at such bulkheads. He has not met the recognized tests in that regard, and I move to strike out his testimony as he has given it regarding the value of such property.

The MASTER: Motion denied.

Mr. BURR: Exception. That is all.

Cross-examination by Mr. PAGE:

Q. I understand, Mr. Greene, that you do not consider that bulkhead property in conjunction with the immediate upland is more valuable than bulkhead property not in conjunction with the immediate upland?

A. Yes.

Q. No more valuable?

A. It is more valuable. I beg your pardon, I did not catch your question.

Q. How much do you add to the value for the fact of the two being in conjunction?

A. You mean where there is a street intervening?

Q. No.

A. Direct. Well, from $100 to $150.

Q. On the entire length?

A. Per foot?
Q. Per foot?
A. Yes.
Q. And if there is a street intervening then you would consider it $100 to $150 less value?
1279 A. No, because where there is a street intervening between the bulkhead and the upland both in the same ownership, I think it increases the value of the bulkhead $100 per foot. Where the land comes directly out to it it is still more valuable; perhaps $150 a foot as a general case; sometimes more.

Mr. PAGE: Will you read the witness's answer?
(Answer read by stenographer.)

Q. I do not think that is very clear. If the street is there it increases the value $150 a foot and if the street is not there it increases it another $100 a foot is your answer as I understand it.

The MASTER: Oh, no.
Mr. PAGE: Am I right.
The WITNESS: No.
Mr. PAGE: Question withdrawn.

Q. You say that the values of bulkhead properties have increased very much in the last twenty years?
A. The value of water front property has increased considerably in twenty years, various parts of the city, varying prices.
Q. By water front property do you mean bulkheads and piers?
A. Bulkheads and piers, yes.
Q. Then a statement that bulkhead property had increased in value in the last twenty years considerably would be correct, would it?
A. Oh, yes, sir.
Q. Taking this bulkhead property on page 2 of Exhibit 48, which is on Tompkins Street, between East 14th and 15th Streets, and East 15th and 16th Streets, which you will see is stated to be Manhattan Gas Light Company to the Consolidated Gas Company, will you state what the value of that bulkhead and water right was in 1884?
A. No, I cannot.
1280 Q. How much has that property appreciated in value since 1884?
A. I could not give you even an approximate idea without more study.
Q. You were in the Dock Department at that time were you not, in 1884?
A. Yes.
Q. And as I understand you derived your practical knowledge of values and all the practical knowledge that you obtained, in the time that you were in the Dock Department, is that right?
A. Well, I have been following it up to a considerable extent since I left the Dock Department and watching the rentals and prices.
Q. Were you familiar with values at that time in 1884 of bulkheads?

A. In 1884 I knew something about it. Not so familiar with it as I became afterwards.

Q. You had been Chief Engineer of the Dock Department for nine years at that time, had you not?

A. Yes, but the first few years I was in the Dock Department my attention was particularly directed and my time absorbed in the strictly engineering part of the work and my connection with that study of rentals and consultations in regard to rentals did not begin in 1875 when I first went there.

Q. When did it first begin?

A. Well, it grew gradually; I could not say exactly when.

Q. Well, you would be unable to say then to what extent bulkhead properties had increased in value in twenty years?

A. Well, I could hunt up a particular case.

Q. Without hunting up particular cases at present you would be unable to give any answer to that question; is that right?

A. I should not like to try to give an answer as to the increase in twenty years.

Q. Well, we will take it for ten years last past?

A. Or even ten.

Q. Or five, would you say five?

1281 A. I would rather look it over before answering and make a little study and examination of it.

Q. Would you be willing to inform yourself as to the values of these properties in 1884?

Mr. MATHEWSON: I think if counsel desire his expert testimony on that subject that they should endeavor to retain Mr. Greene and not seek it in this way. I should object to that.

Mr. PAGE: I asked him whether he would be willing to do so. I did not ask him to do so.

Q. How much has the value of bulkheads and dock property increased since 1898?

A. Well that varies very much. In 1898 on the North River piers were renting for $4,000, $5,000 and $6,000 a year up in the vicinity of 45th or 46th or 47th streets. A few weeks ago the Dock Commissioner refused an offer of $25,000 per annum for a pier at the foot of 44th Street, a large handsome pier, to be sure, but at the same time no such price has obtained before as I recollect for any pier up above that. At the foot of 41st Street, one half of a new pier is leased for $8,800, the half of the pier. And those are indications of an increase since eight years ago when such prices did not obtain there.

Q. Then the rental value in some cases has doubled and in other cases much more than doubled?

A. In some cases yes, sir, and in some places. The old price for a pier under the new plan at Canal Street and West 10th Street was $35,000 to $40,000, and now it is $50,000 to $60,000.

Q. And you took this increase in valuation into consideration in making your estimates of the value of these bulkheads about which you have testified?

A. Yes where it applied. I made a particular study of that 16th Street, 17th Street, 18th Street, 19th Street and 20th Street to 23rd Street, of the water-front there some time ago.

1282 Q. And you testified in behalf of the Consolidated Gas Company in the condemnation proceedings as to those particular piers?

A. Yes.

Q. Now the bulkheads and water rights that were acquired by the Consolidated Gas Company in 1884 did not decrease in value between 1884 and 1898, did they?

A. I should say not.

Q. I mean of course these that you have testified to to-day?

A. I think not. I think they should have increased in value.

Q. So that we have from 1898 to to-day they have doubled or more in value and they increased somewhat besides in the 14 years preceding.

Mr. MATHEWSON: The witness did not say that they had doubled. He said in some cases rental values had doubled.

Mr. PAGE: Let the witness answer the question and if he did not so state, he can say so.

Q. (Question repeated)?

A. What, these particular bulkheads there?

Q. Yes.

A. I did not mean to say that.

Q. Well what about these? You made a statement a short time ago that you knew of cases where the piers rented for $4,000 and $5,000 and $25,000 had been refused in one case and a portion of a pier had been leased for $8,800. Were those anywhere near any of the properties you have been testifying to to-day?

A. No, sir—well those were along the North River at 44th Street to 45th Street—those were near 42d Street and also near 44th and 45th Streets.

Q. Well that is a part of the property that you have testified about to-day?

A. Yes.

Q. 41st Street to 42d Street and 44th to 46th Streets?

A. Yes.

Q. That would apply, would it, to that particular property that you have testified to to-day?

1283 A. It shows that there is an increase in value of that property in that vicinity.

Q. Is there any relation between rental value and the real value?

A. I think so. I think that the real value is ascertained by capitalizing the net rental value at a given percentage 4 or 4½ or 5.

Q. Will you state how much the bulkheads at 41st Street to 42d Street and 44th Street to 46th Street, North River, has appreciated in value since 1898?

A. No, I would not like to state that without further consideration.

Q. I suppose that the knowledge that you had of the increase in rental value of the specific piers that you have spoken of on the

North River you took into consideration in forming your estimate of value at 41st and 42d Street and 44th to 46th Streets didn't you?

A. Yes, sir.

Q. But you are unable to state how much that made?

A. No, I took other things into consideration with it, you know.

Q. What other things did you take?

A. In fixing the value of that thing, I took into consideration that any bulkhead right was worth $500 a foot in that vicinity and that it had an increased value from ownership of the bulkhead and the upland being the same person and something of an increased value from the general rise or the increased value of property in some years past.

Q. How much was that factor, the general rise in property in your estimation?

A. That I am unable to estate. I did not give it a definite enough value to be able to state it.

Q. Well, you gave a value of $750 per lineal foot?

A. Yes.

Q. That is $250 a lineal foot more than your standard of $500?

A. Yes, sir.

Q. How did you arrive at that $250?

A. As I say, I took the general points into consideration;

1284 all those points without—I have not heretofore attempted to separate them or itemize them.

Q. These valuations were just from general impressions in your mind and not based upon any calculation based upon the standard of value, is that right?

A. Well, not exactly.

Q. Well, how was it, how did you arrive at it?

A. As I said before, I took the old basis of $500 and added $250 for the other changes, different from the old time when $500 was established.

Q. When was that $500 value established?

A. Oh, away back in 1892 and 1893, along there.

Q. 1892 and 1893?

A. And subsequent, some of it, it was used subsequent to that.

Q. Can you state whether that amount $500 was greater than the prices that had obtained before?

A. No, I cannot. I don't know what the price that had been obtaining before was in that vicinity.

Q. In what vicinity was it that the value was established, as you state of $500?

A. 23d, 24th, 27th, 28th, and 29th Streets, on the North River, and there was another one I think between 21st and 22d Streets, where the owners and the Dock Department came to an agreement, but it was not confirmed by the Commissioner of the Sinking Fund.

Q. As I understand this $500 rate that you have accepted as a standard in 1892 or 1893 was the result of a compromise or settlement of litigation?

A. Not altogether. A decision in some cases of litigation and in another case it was fixed between the owners and the Dock Depart-

ment, and then in still other cases as a stipulation between the opposing counsel.

Q. First it was fixed then by decision and afterwards that decision was followed by stipulation of counsel in other cases, is that it? Or was the decision the result of an agreement between counsel and effectuated by an order of the Court?

1285 A. Well, I suppose this agreement was influenced by the very old cases down below where $600 a foot was awarded as the result of litigation, but I don't know of course the reason why opposing counsel came to an agreement for $500.

Q. How did you come to adopt that as a standard from which to work?

A. Because I thought it was a fixed standard; I considered it a standard.

Q. Fixed by whom?

A. By the concurrent action of the opposing counsel, the officials of the Court, and the agreement of owners and city officials.

Q. I suppose where you have given a value of $840 per lineal foot you have considered that the values of those rights had increased $340 since 1892 or 1893, is that right?

A. No, the way I have made that up was to take the old basis of $500 and add $100 for the lot across the marginal street being in the same ownership, and then I added 40 per cent. for the increase in value of property in that vicinity for a number of years, which I have compiled. I have forgotten now for how many years it was, but it was for a number of years.

Q. Well, your compilation of increase would probably be from the time of the standard, would it not; or the adoption of the standard? If you start at $500 and are going to increase that, you would naturally start your estimate of increase at that?

A. No, the estimate of $500 remained as a sort of standard or foundation for several years, either for lack of transactions or for some other reason.

Q. Now, in the East River I notice that you fix a value there of $350 per lineal foot?

A. Yes.

Q. How did you arrive at that?

A. I took $250 as the value of a bulkhead in that vicinity, or such as it would be if simply on the exterior side of the marginal street. Then I add $100 for the ownership of the upland opposite the bulkheads being in the same person.

1286 Q. Did you have any standard there?

A. Yes, the standard of the bulkheads scattered and separated along on the East River.

Q. Was that established in the same way that the $500 standard was?

A. No, that came largely from the rentals and somewhat from the awards made just about there in the Brookman matter, and the Consolidated Gas Company's bulkheads, between 18th Street and 23rd Street on the East River.

Q. What value did you take at 110th Street and the East River?

A. $150 for the bulkhead on the exterior side of the marginal

street and $100 additional because the ownerships of the bulkhead and the upland opposite are in the same person, making $250.

Q. How did you establish the value of $150?

A. By general comparison with the bulkheads above and below.

Q. At the present time you mean?

A. At the present time, yes, sir.

Q. You mean by that, what they produce in rentals, their rental values?

A. Yes.

Mr. PAGE: That is all. Now, I move to strike out the testimony of this witness, on the ground that the cross-examination has demonstrated that he is not an expert; that he has not compiled his values in the usual and accepted method of arriving at the values. It seems to be largely based on guesswork.

The MASTER: Motion denied.

Mr. PAGE: Exception.

Redirect examination by Mr. MATHEWSON:

Q. While you were with the Dock Department, and as far as your knowledge goes since, have there been many sales of bulkhead property by the city, or piers?

A. Very few indeed.

1287 Q. Has it not been the policy to rent them rather than to sell them?

A. The city piers?

Q. Yes.

A. The city cannot sell them, so it has to rent them.

Q. And according to your information have there been many sales of piers of the city's?

A. Very few, indeed.

Q. And with the exception of those few sales is there any feasible method which you know by which you can estimate values by considering rentals and things of that sort?

A. That is about the only way, and I think it is the best way.

Q. Now, while you were in the Dock Department and conferring with the Commissioners, were the values of the property discussed in arriving at the rentals?

A. No; what rentals they would bring; what rentals they would bear.

Q. And the value was rather determined from the rentals than the rentals from the value?

A. Yes.

Q. Now, this East 21st Street pier, respecting which the condemnation price was $300 and your testimony $650; how long ago was that?

A. 1903 and 1904; 1903 I think.

Q. Do you know of any award on the North River with relation to bulkhead property more recently than the $900 award between 22nd and 23d Street, which coincided with your testimony?

A. No, I do not.

Q. In reference to the 42nd Street property and the property be-

tween 44th and 46th Street, do I understand that you have appraised the bulkhead and water right property as now in possession by the Consolidated Gas Company?

A. Yes.

Q. You spoke about five per cent. being a fair rental in the particular case which you mentioned. I want to ask you whether in establishing or employing that figure you took into consider-
1288 ation the fact that this waterfront property is increasing in value as you have stated?

A. Yes.

Q. You have been asked in reference to certain piers, one of which an offer of $28,000 or such a matter was made for. Was that a pier which you said was a large and fine pier?

A. Yes.

Q. Is the amount of rental that you can receive for a pier governed in any measure by the character of the pier?

A. Oh, yes.

Q. So, would you be able to compare piers, even at the same location, at different periods, unless you knew the character of the pier in each case?

A. That would be advisable, certainly.

Q. Do I understand correctly that, taking the $500 which you spoke of as a sort of standard, the difference between that and the $750 which you mentioned in this 42nd Street case represents both the increase in value and the conjunctivity with the upland, and any other elements of that character?

A. That is my idea, sir.

Q. And how is that $250 arrived at, other than your general estimate from your experience and knowledge of such matters?

A. Not otherwise.

By Mr. BURR:

Q. What business are you engaged in now?

A. I am a civil engineer in general practice; professionally as a consulting engineer on waterfront property and other engineering works, also as a designer and constructor; that is, supervising the construction of wharves, piers and bulkheads, and also, as I have said, for some years past in eight or ten cases I have been employed to make valuations of waterfront property. I have kept up my acquaintance with it.

Q. Then the only experience you have had, that you can testify definitely regarding is the one to which Mr. Mathewson has
1289 just called your attention, where you testified that the value of the property was $900 per lineal foot, and the Commission agreed with you, and the other instance where you testified that the property was worth $600 per lineal foot and the Commissioners fixed it at $350 per lineal foot?

A. Well, the other cases, some of them, have not been decided. I do not know how they are coming out.

Q. Yes, that is what I say; the only two regarding which you can speak definitely is the one that Mr. Mathewson alluded to, where you fixed $900 and the Commission agreed with you, and the other case

where you fixed $600 per lineal foot and the Commission fixed it at $350?

A. That is all I remember at present.

By Mr. MATHEWSON:

Q. In addition to your personal experience after you left the Dock Department, as well as while you were there, have you endeavored to keep posted in reference to sales of waterfront property and rentals, for the purpose of informing yourself?

Mr. BURR: I object to that. That does not mean anything. He may have endeavored and failed. It is quite evident that he did.

Q. I will ask if he has. Have you kept posted?

A. I have.

1290 EDMUND C. PREISS, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside?

A. In the City of New York.

Q. What is your age?

A. My age is 65 years.

Q. What is your business?

A. My business is real estate, in different branches.

Q. What branches?

A. Buying and selling, exchanging, appraising, procuring loans, testifying in Courts and before Referees in regard to the values and conditions of values all over the city, for thirty-seven years—or rather for thirty-nine years.

Q. Have you been in the real estate business in the City of New York during this entire thirty-nine years? That is since 1867?

A. Yes.

Q. Have you ever been called upon to give your opinion in judicial proceedings, as to the value of property in the Island of Manhattan?

A. About four or five hundred times.

Q. Will you state some of the clients for whom you have acted in appraising real estate, or purchasing or selling?

A. I have been and still am employed by the elevated railroad companies and have testified for them in about four hundred and sixty cases on the different lines, and especially on the easterly lines, Third Avenue, Second Avenue, First Avenue, 23rd Street, 34th Street and 42nd Street. I have been employed very extensively by the New York Central & Hudson River Railroad in appraising all their holdings on Manhattan Island—I have the papers here—for the purpose of testing the tax assessments; went over that twice. All of their property on the westerly side. I have here the map.

Q. We do not care for the map, just give the names?

1291 A. Then I have been testifying in insurance proceedings for the New York Life Insurance Company; I have been testifying and also appraising property for the Ayer Estate in Boston.

I have been appraising and testifying for the New York Edison Company, their holdings in the city; in condemnation proceedings of the Bellevue Hospital site, and extension; condemnation proceedings for the Chanler Estate, 14th to 15th Street, between 10th Avenue and the river. I have been appraising for John Pierpont Morgan; I have been appraising for different members of the Jay Gould family, in a variety of instances.

Q. And for the Gould Estate?

A. Yes.

Q. Well, that is enough to begin with. Have your actions in appraisals, sales and purchases been confined to any one part of the Island of Manhattan since 1867, or have they covered various parts?

A. Yes, they have been spread out all over the city as occasion demanded.

Q. Do you know the values of real estate?

A. I guess I do.

Q. On the Island of Manhattan?

A. Yes.

Q. I will ask you to refer to Exhibit No. 48, first the parcel at the southwest corner of 116th Street and Lexington Avenue, being Block 1,643, lots 56, 57 and 58. Have you appraised that property?

A. Yes.

Q. What is the value of that parcel?

A. $89,200.

Q. Will you next look at the parcel at the northwest corner of Third Avenue and 114th Street, on the same page of Exhibit No. 48, being block No. 1642, lots 32 and 33—is that?

A. Yes, that is right.

Q. State whether you examined and appraised that property and what its value is.

A. I have examined it thoroughly, and put the value at $98,150.

Q. Does that include the office, the building used by the company as an office on the premises?

1292 A. That building and the building in the rear, that whole concern, lots and buildings.

Q. Did you estimate the value exclusive of the buildings?

A. I did.

Q. What is that?

A. I put the value of the buildings at $25,000.

Q. That would make the property exclusive of the buildings what?

A. Exclusive of the buildings, $73,150.

Q. Will you next take the parcel at the southeast corner of Irving Place and 15th Street, on the same page of the exhibit, being Block No. 870, lots Nos. 54, 55, 59 and 60, and state whether you have appraised that property and what its value is with the buildings and without.

A. I appraised the total value of this property at $306,550; land alone, $251,555, and the buildings at $55,000.

Q. Now, will you take the plot on the same page of Exhibit 48, the northeast corner of Hester and Elizabeth Streets. State whether

you have appraised that and what the value is with and without the buildings, being Block No. 239, lots 1 to 5.

A. I value the ground at $158,400; buildings $24,000.

Q. What is the total value?

A. $182,400.

Q. Will you look at the plot on the south side of 15th Street, west of Avenue B, being Block No. 972, lot 45, appearing on the second page of Exhibit 48. State whether you have appraised that and what the value is.

A. $22,347.

Q. Please take now page 2 of Exhibit No. 48 and refer to the property between 17th and 18th Streets, fronting 350 feet on each street, west of Avenue C, being Block No. 985, lots 7, 19, 20, 39 and 40.

A. The land value, $261,800.

Q. Next, look at the plot on the same page between 15th and 16th Streets, fronting on the westerly side of Avenue C, being Block No. 982, lot 13.

A. I appraise that at $430,760.

1293 Q. Take next the plot between 15th and 16th Streets, 235 feet on each street, fronting on the easterly side of Avenue C, being Block No. 989, lot 1, and say whether you have appraised that and what the value of that plot is.

A. That I have appraised at $182,820.

Q. Will you take now the plot at the easterly end of the same block fronting on Avenue D, 191 feet on both 15th and 16th Streets, being Block 989, lot 26.

A. That I value at $136,048.

Q. Take the next, if you please, the plot on the easterly side of Avenue D, between 15th and 16th Streets, running to Tompkins Street, being Block 991, lot 26.

A. Lot No. 26, $157,690.

Q. The entire block between Avenue D, 15th and 16th Streets, and Tompkins Street, bears one lot number, which is 26?

A. The block, 14th and 15th between Avenues C and D?

Q. No, this one (indicating)?

A. That is the block I have been talking about.

Q. I ask you whether that is lot No. 26?

A. To the best of my knowledge and belief it is. It seems to me that that is one and the same number; or else I may be in error as regards the lot number. It might possibly be not the lot number.

Q. But your value of $157,690 applies to the entire square bounded by those four streets?

A. Yes, that is correct.

Q. Now, take the plot bounded by Avenue D, 14th, 15th and Tompkins Streets, which I have here indicated as block No. 991, Lots 1 to 47, inclusive, or Lots 1 and 47, I do not know which. What is the value of that entire plot bounded by those four streets?

A. 233,481.

Q. Now, I direct your attention to the property at West 18th Street, before the recent condemnation proceedings by the city, and

I ask you whether you have appraised the property bounded
1294 by 16th and 17th Streets, 10th Avenue and 11th Avenue, being block No. 688, Lot 21.

A. I beg to be excused in the value of the block 989, No. 26, on the northwest corner of Avenue D and 15th Street. The value of that property is $136,048.

Q. Which is that?

A. Block No. 989, Lot 26. There are two lots 26 there.

Q. And two blocks No. 991?

A. Yes.

Q. Now, will you look at the plot on page 2 of Exhibit No. 48, bounded by 14th Street, 15th Street, Avenue C and Avenue D, being block No. 988, lot No. 1; say whether you have appraised that and what the value is?

A. I have appraised that at $574,200.

Q. I now direct your attention to the property west of 16th to 18th Street as it existed before a portion of the property was taken by the city. Look first at the plot bounded by 10th Avenue, 11th Avenue, 16th and 17th Streets, being Block No. 688, lot 21.

A. I value that at $838,200, that block as it existed.

Q. Will you take the next block above that, which was bounded by 10th and 11th Avenues and 17th and 18th Streets, as it existed, being Block No. 689, lot 17.

A. That is the same value; $838,200.

Q. Now, take that portion of the block north of that, which was owned by the complainant, that is between 18th and 19th Streets, fronting on the westerly side of 10th Avenue and 525 feet on 18th Street, and the same distance on 19th Street, less five city lots which were taken out, being Block No. 690, lots 12, 40, 42, 43, 44, 45, 48, 49, 50, 51, 52 and 53.

A. The value of that property is $452,100.

Q. How many lots are out on the north side of that plot?

A. On the north side there are out five lots.

Q. So that the property which you have valued excludes
1295 those five lots from your estimate?

A. Yes.

Q. Take next the plot facing on 11th Avenue, being 350 feet on 19th Street and 20th Street, being Block No. 691.

A. I value that at $356,400.

Q. Take next, if you please, the small parcel bounded by 11th Avenue, 13th Avenue, 16th and 17th Streets, being that small triangular piece.

A. That is the same state of affairs; that is two plots. The same block number and the same lot number.

Q. The same block number, but not the same lot number; I have lot 3 and lot 12.

A. Lot 3 and Lot 3. This lot here, 666, lot 3 (indicating on Exhibit 48). I have got that. That is $67,991.

Q. Now take the plot just above that, bounded by 17th and 18th Streets, 13th Avenue and 11th Avenue, being Block No. 666; I have it marked as lot 12.

A. That may be correct.

Q. At all events, it is the same plot?

A. Yes, $224,122.

Q. Take, if you please, the plot on the north side of 18th Street on Exhibit 48, third page, being 75 feet front on 18th Street and beginning 275 feet east of 10th Avenue, Block No. 716, Lot 14.

A. I value this property at $43,875.

Q. Does that include the buildings?

A. Yes.

Q. How much exclusive of the buildings?

A. The buildings I value at $4,500. That would give the land value $39,375.

Q. Take next the plot on the south of that, on the south side of West 18th Street, fronting 225 feet on West 18th Street, being block 715, lots 51 to 59?

A. I value this property at $121,750.

Q. Turn now to page 4 of Exhibit 48 and state whether you have appraised the parcel on the south side of 20th Street, 175 feet front, being block 951, lot No. 35?

A. I did.

Q. What value do you fix for that?

A. $85,820.

1296 Q. Does that include the buildings?

A. Yes.

Q. How much without the buildings?

A. I value the buildings at $20,000, that would leave for the land value $65,820.

Q. Have you appraised the plot shown on the same page; that is, between 20th and 21st Streets, west of Avenue A, being block No. 952, lots 7, 29, 30, 33, 34 and 35?

A. Yes, I have appraised that property at $438,530.

Q. Does that include buildings?

A. I think it does. There are tenement houses there; that includes buildings, $7,500, so that the land value would be $431,030.

Q. Those buildings are tenement houses, are they?

A. Yes.

Q. Did you include in your appraisal any buildings used for making gas or any structures of that kind?

A. No, sir, only office buildings and tenement houses; that means the main office building on 14th Street and the one on Irving Place; those little houses that are sometimes in the middle of the block where gas is manufactured, with desk room, or something else for the superintendent, they are not included.

Q. Look at the next block north, between 21st and 22nd Streets, First Avenue and Avenue A, being block 953, lot No. 1; state whether you have appraised that and what you value it at?

A. I value that property at $619,136.

Q. State next whether you have appraised the property bounded by Avenue A and the marginal street, 21st and 22nd Streets, being block No. 979, lot No. 1?

A. That block I value at $570,080.

Q. Have you also appraised the block south bounded by 20th and 21st Streets, Avenue A and Avenue B?

A. Yes.

Q. That is block No. 978, lots Nos. 1, 2, 3, 5 and 6?

A. Yes, $539,474.

1297 Q. That includes buildings?

A. That includes buildings, yes.

Q. Are they tenements also?

A. Yes, they are tenement houses.

Q. State how much your valuation is excluding those buildings?

A. Excluding the buildings, the land value is $518,474, and the buildings are $21,000.

Q. In making this appraisal of this particular plot, have you excluded this lot facing on Avenue A?

A. Yes.

Q. 23 feet front?

A. Yes, sir.

Q. Have you also appraised the plot bounded by Avenue B, the marginal street, 20th and 21 Streets, being block 987, lots 37, 41, 42, 43 and 51?

A. Yes, sir.

Q. And at what do you appraise that?

A. $114,400.

Q. Take now page 5, Exhibit 48, and say whether you have appraised the plot on the north side of 42nd Street, facing 150 feet on that street, being block 1090, lot 23, and what your value is for that?

A. The value of that property is $72,600.

Q. Take next the plot on the north side of 42nd Street, facing 100 feet on that street, beginning 225 feet east of 11th Avenue, being block 1071, lots 10 to 13?

A. $57,200.

Q. Will you next look at the plot on the north side of 41st Street, fronting 200 feet, beginning 100 feet east of Eleventh Avenue, being Block 1070, lot 5?

A. $83,600.

Q. Will you take next the plot bounded by 42d Street, Eleventh Avenue, 41st Street, being Block 1089, lot 1, and say what the value of that plot is.

A. The value of that plot is $957,600.

Q. Have you included in that the value of any bulkhead rights?

A. No, sir.

Q. Nor any land under water or outside the bulkhead line?

A. No, sir.

1298 Q. That is for the upland, then?

A. That is for upland from Eleventh Avenue west to the bulkhead line.

By Mr. PAGE:

Q. How many feet is that?

A. That would be 1,050 feet. Eight hundred feet on the easterly side and 250, that makes 1,050.

By Mr. MATHEWSON:

Q. I see on the north side, that is on 42d Street, it appears by my map to be 1,051 feet 4 inches, or a slight variation?

A. That is just one of those things I could not take into consideration. It will probably be correct as it is here, 1,050 feet. It might be an inch more or a half an inch more.

Q. It would not make any difference in your estimate, I assume?

A. No, sir. It wouldn't make any difference at all in a plot like that.

Q. Will you turn next to page 6 of Exhibit 48 and say whether you have appraised the property between 44th and 45th Streets, Eleventh Avenue and the bulkhead line, being Block 1092, lots, 1, 28, 38, 38½ and 39.

A. Yes, sir.

Q. What is the value of that?

A. The value of that property is $647,150.

Q. Does that include any buildings?

A. I think it does. Yes, that includes buildings to the extent of $7,500, so that the land value would be $639,650 without buildings. The value of the building—there is one house there, it is $7,500, so that the land value would be $639,650 and the total value is $647,-150.

Q. Now, in this appraisal have you taken into consideration the value of the bulkhead rights at all?

A. No, sir, I have not.

Q. Nor any land at all outside the bulkhead?

A. Neither.

1299 Q. You have included the land up to the bulkhead line, have you?

A. Yes, sir.

Q. That would make 950 feet on 44th Street?

A. Yes, sir.

Q. And a little shorter distance on 45th Street?

A. Make 750 feet on 45th Street.

Q. No, no. This is Block 1093, lot 1. On 44th Street, what distance is it?

A. Oh, 950 feet, and on the other it makes 925 feet. There is one lot less.

Q. That is on 45th Street?

A. On 45th Street.

Q. Take the block or plot, the north, between 45th and 46th Streets, facing 750 feet on 46th Street and 825 feet on 45th Street, running from the bulkhead line easterly on 45th and 46th Streets, and state what value that plot represents.

A. I value that plot at $546,000.

Q. Let me ask you whether in that you include any bulkhead rights?

A. No, sir.

Q. Or any land under water outside the bulkhead line?

A. No, sir.

Q. Please look now at page 7 of Exhibit 48. Take first the plot

between 62nd and 63d Streets, being 481 feet 6¾ inches on 62nd Street, being Block 1457, lot 6.

A. That value is $185.240. Block 1455, lot 13, I have appraised at $222,750.

Q. That is the property between 60th and 61st Streets, fronting on the westerly side of Avenue A?

A. Yes, sir.

Q. Will you take next the small parcel at the northeast corner of 60th Street and Avenue A, being block 1474, lot 24, and will you state whether you have appraised that and what its value is?

A. I have appraised that at $23,535.

Q. Please turn now to page 8 of Exhibit 48. Will you say whether you have appraised the parcel between 65th and 66th Streets, West End Avenue and the Hudson River Railroad Company,
1300 being block 1177 and lot 21.

A. Yes, sir. The value of that property is $194,062.

Q. Have you also appraised the block bounded by 65th and 66th Streets, West End Avenue and Amsterdam Avenue, being block 1157, lot 1, shown on the same page?

A. Yes, sir.

Q. And what is its value?

A. Its value is $701,680.

Q. Have you also appraised the plot on the south side of 65th Street, 100 feet square, beginning 300 feet west of Amsterdam Avenue, being block 1156, lots 45 and 46?

A. Yes, sir. Its value is $40,100. That includes building.

Q. How much for buildings and what is the net value of the land?

A. The value of the building is $7,000. The value which I have given you, $40,100, is the value of the land only; the value of the building is $7,000, making a total of $47,100. I am wrong, the value including the buildings, is $40,100 and the building alone is $6,500, so that would give for the total value $40,100 less $6,500 for the buildings, and make $33,600 for the land.

Q. For the value of the land alone?

A. Yes.

Q. Now turn please to page 9 of Exhibit 8 and say whether you have appraised the block bounded by 98th and 99th Streets, First Avenue and Second Avenue, being Block 1670, lot 1.

A. Yes, sir.

Q. What is its value?

A. Its value is $667,184.

Q. Take next the block bounded by First Avenue, the marginal street, 98th and 99th streets, being block 1692, lot 1; have you appraised that and if so what is its value?

A. $262,697.

Q. Now take page 10 of Exhibit 48 and say whether you have examined the property shown at the northwest corner of 111th Street and First Avenue, fronting 225 feet on 111th Street and 50
1301 feet on 112th Street, being Block 1683, Lots 18, 34 and 35.

A. Yes. The value of that property is $118,800.

Q. Have you appraised the plot between 110th and 111th Streets,

facing on the west side of First Avenue, being block 1682, lots 8 and 11, 475 feet on both streets?

A. Yes, sir. Its value is $436,700.

Q. Have you also appraised the block bounded by First Avenue and Pleasant Avenue, 110th and 111th Streets, being block 1704, lot 1?

A. Yes, sir.

Q. What is the value of that?

A. $556,827.

Q. Please turn now to the next page of Exhibit 48, being the plot between 132d and 133d Streets, fronting on the eastly side of 12th Avenue, being 675 feet on 132d Street and 650 feet on 133d Street, Block 1999, lot 1; have you appraised that?

A. Yes, sir.

Q. What is its value?

A. Its value is $447,700.

Q. Please turn now to the following page and say whether you have appraised the irregular plot facing 93 feet 8 inches on the westerly side of Sherman Avenue and a considerable distance on Kingsbridge Road, being Block 2175, lots 15, 18, 22 and 100, as shown on this map?

A. Yes, sir.

Q. What value do you place on that?

A. Its value is $103,162.

Q. You did not appraise the Shadyside property of the company in New Jersey?

A. No, sir.

Q. And have you in your appraisals included any bulkhead rights or any land under water inside the bulkhead lines at all?

A. None whatever, but I have in all cases where the land was fronting a bulkhead opposite, added an allowance to the front of that particular avenue; in other words, where the land and block fronts a water right privilege, that means on the opposite side I have made on the deduction an allowance of 5 per cent.

Q. On the value of the land?

A. On the value of the land. That means the value of the land immediately fronting, not the whole block of 1,000 feet, but the land which is fronting, which would be fair, for instance 200 by 100. I see the other experts put value for conjunction on the value of the bulkhead, and I put it on the value of the land and deduct it afterwards from the bulkhead, making no allowance there.

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Q. You have not included in your figures any buildings used for gas making purposes or any holders or anything of that sort, have you?

A. No, sir.

Q. Only the office buildings and tenements as you have testified?

A. Yes, sir.

Q. Will you state what the total is of the valuations to which you have testified, if you have computed it?

A. Well, I have made the total here, but I just discovered during

the examination that I have left out two items under block on 14th and 15th Streets, which I would have to add, and I will give you that to-morrow. I have the total figure here, but it is incomplete; it lacks two items which I have not accounted for.

Q. Will you totalize it from your figures and give it to me?

A. Yes, sir.

Cross-examination by Mr. PAGE:

Q. Where is your office?

A. 41 Liberty Street.

Q. What is the name of the firm, if any?

A. Edmund C. Preiss.

Q. There is no firm?

A. I am the only one. I have always been alone. I have no partner.

Q. I understand you to say that you have appraised real estate for purposes of testimony five hundred times?

A. Yes, sir.

Q. And four hundred and sixty of those were in elevated railroad cases?

A. Well, I am permitted to tell you, I have appraised and
1303 testified on Fourth Avenue for the New York Central and Harlem Railroad Company and the elevated, I put them al- together, as a rough guess, perhaps it is not five hundred and not five hundred and fifty; it would be between that, between five hundred and six hundred anyway, five hundred and fifty at least.

Q. And in these cases you have been retained by the elevated railroad?

A. Yes, sir.

Q. And the New York Central?

A. Yes, sir.

Q. Have you ever testified for the Consolidated Gas Company before?

A. No, sir.

Q. You have usually testified on the side of the owner of property for the purpose of getting as large a value as possible?

A. No, I have testified even in cases where that not only was not wanted but even not indicated to be. I take the values as they are, independent of what purpose it is, it makes no difference to me.

Q. We will take this property on 116th Street and Lexington Avenue, which is Block 1643, lots 56, 57 and 58?

A. Yes, sir.

Q. Those are vacant lots aren't they?

A. Yes, sir.

Q. Will you state how you arrived at your value of $89,200 for that property?

A. Yes, sir. I took the value of an inside lot on 116th Street, 25 by 100 feet to be $21,000. I added 60 per cent. to that for the corner, making the corner $33,600. I allowed for the lot next the corner $1,000 more than for the others, making $22,000, and I cal-

culated the ten extra feet on the basis of $21,000 at $8,400. I added to that a plottage of 5 per cent. That gives $98,150.

Mr. MATHEWSON: $89,200 I have it.

The WITNESS: Well, that is wrong, it is $98,150—no, that is right, $89,200—that is right.

Q. Where do you get your ten extra feet to add?

A. Well, I get the ten extra feet because this property is 80 feet.

1304 Q. Well, three lots would be 75 feet, and that would only leave 5 extra feet?

A. That would be five extra feet. It would be $4,200, and that figure is not correct. I will have to change that. The five extra feet instead of ten extra feet is $4,200, and that would give $85,000 for the whole value, instead of $89,200.

Q. Then you wish to correct your valuation on the plot?

A. Yes, I do, it is a clerical error here, instead of ten feet, five feet.

Q. Take the next property. Block 1642, lots 32 and 33?

A. I have taken the value of an inside lot on Third Avenue at that point to be $25,000. I have added 50 per cent. to that for the value of a corner lot, which gives me the value of a corner lot to be $37,500. I have valued a lot on 114th Street at $14,000 and allowed $1,000 more for the lot right adjoining the corner. That would give me $66,500. I have added to that 10 per cent. plottage. That would make $73,150. I added the value of buildings $25,000, arriving at $98,150.

Q. The lot which you say adjoins the corner is 100 feet distant from the avenue, is it not?

A. Yes, sir, but it is considered worth $1,000 more; every lot adjoining the corner for special purposes, the tendency, being to have extra large and extra deep plots to-day, anyway.

Q. Would you add that same value whether the lot adjoined directly the corner lot and was only 25 feet from the corner?

A. Yes.

Q. Or whether is was 100 feet, it would make no difference in your estimate?

A. No, sir, not on a live avenue like that.

Q. How do you arrive at your lot value on Third Avenue?

A. I know the values of Third Avenue since 1869, and 1868 and

1867 up to date. I have since that time kept my separate records where I have made an extract from the Real Estate Record

1305 and Guide every year. I have tabulated all these sales and I have testified in so many cases on Third Avenue that I am perfectly familiar with their values.

Q. And you do not have to look up now to find what is the value, you are so familiar with it?

A. Hardly. In the majority of cases I will tell you right off. This is Part 5 (indicating book), you see. Here always I can give you the sales from First, Second, and Third Avenues, wherever it is, from 1870 or 1869, up to the present hour, year by year, written by

my own hand with the configuration, what it is, and I have my lot books, where I have tabulated it besides. So I can read off almost everywhere the whole abstract of the title you give me from my own books, and I have done that from 38 to 39 years, before a title company existed, or information bureaus.

Q. And you have taken the values of the properties at the considerations expressed in the deeds? A. Not always. For when you sell property for 39 years, you make a distinction between fake sales and genuine sales, forced auction sales and executor's and trustee's sales. I know the difference quite well, when I read it.

Q. Have you sold property in this neighborhood?

A. I have, yes, sir.

Q. When?

A. Long ago. I find many years I can give you what I sold there (referring to paper) corner of 70th Street. Northwest corner of 69th Street. Northwest corner 72d Street.

Q. Well, that is two or three miles from here.

A. Well, I will come nearer to it. I was just going up there. I am afraid I left that list at home or at the office, but I can bring it to you to-morrow. I ought to have it here because I was looking particularly for it. It is not here, but I have around 114th Street,

there are only one or two sales in the immediate vicinity
1306 that I remember. I have sales from 23d Street to the river.

Fro mthe Harlem River to the Bridge. But in the immediate vicinity of 114th Street, I think I sold some property in 112th Street, but I cannot remember it just now. I cannot tell you from memory, but I have that list.

Q. You did not look up those sales for the purpose of preparing yourself to testify?

A. No, because they are so remote, I have not been selling any property on Third Avenue for a long time.

Q. How many years since you sold property on Third Avenue?

A. That I cannot tell you. It may be ten years and fifteen years that I have not sold anything on Third Avenue in that section. Most of my time has been taken up with all this, and I am all alone.

Q. Most of your time has been taken up in preparing these books that you have prepared?

A. Well, how could I prepare my cases and get through with it for fourteen years if I didn't get posted? It is pretty hard work to be posted.

Q. Yes, I should think it was?

A. And it is a good deal of valuable time wasted on it, too. Now you see, for instance, here on Third Avenue, I have the sales, what I brought with me, from 1898 to 1905, every one of them. Now in making up my values, in order to refresh my memory I looked over this list. I only put reliable sales in, executors' and trustees' sales in, and such like. I don't put in nominal considerations or trade deals, because I know they are no good for my purpose.

Q. I understand from your testimony that for the last ten or fourteen years your business has been that of an appraiser rather than as a broker?

A. No, well, I have been selling property whenever I had the time to do it.

Q. Your time has been so engaged in making appraisals that you have not had much time to sell?

1307 A. I have not been extensively engaged in selling property for the last few years, that is true. I have not had the physical time to do it.

Q. You have based your conclusions, as I understand it, largely upon sales by executors and trustees?

A. Executors, trustees, or sales that I know to be perfectly straight, and where the consideration is known to me, somehow or other. I have lots of property for sale and I know what the asking prices are and what the selling prices are, and I can judge after my experience whether the considerations named are bogus or correct.

Q. But your information is derived from the recorded instruments rather than from your actual experience?

A. Well, I don't know, I started as a very active man so many years ago and have been at it ever since. I have never lost sight of it and have kept myself posted, and whether I sell property personally or not does not increase my knowledge and would not have increased my knowledge or my ability to testify.

Q. Well, we will take now plot 870, which is the Irving Place and 15th Street corner, and see how you arrived at the value of that property?

A. On Irving Place I took the value of an inside lot 20 by 100 feet to be $45,000. I allowed for the lot adjoining the corner 25 by 100 $2,000 more; that is $47,000. I allowed 50 per cent. over and above the value of $45,000 for the corner, that will make the corners $72,500. I accounted for nine additional front feet at $1,800 per front foot, $16,200 on Irving Place. On the south side of 15th Street I took a lot right next to the corner to be worth $22,000, a full lot 25 by 100 feet. Now, the lot in question being only 84 feet in depth, that is, according to the Hoffman rule, 93 per cent of a full lot, $22,000, which is $20,500 for that lot. The next lot 25 by 100 feet I have taken to be worth $21,000, and

1308 93 per cent of that the lot being only 25 by 84 feet depth, is $19,500. There was an excess of five feet there by 84 feet on 15th Street, which I valued at $3,900, which makes a total of the land value of $224,600. I have allowed a plottage on that plot of 12 per cent., that is $26,950. Adding that together, I get $251,550 land value and $55,000 for the building, or a total of $306,550.

Q. Let us see. You value the corner lot at $72,500?

A. Yes, sir.

Q. You valued the lot ne the corner on Irving Place at $47,000?

A. Yes, sir.

Q. That takes care of fifty feet. What did you value the next lot at?

A. $45,000.

Q. And the nine adjoining feet, $16,200?

A. Yes, sir.

Q. Then we come on to Irving Place and you have a lot which you value at $20,500?

A. That is for a lot 25 by 84, that is on 15th Street?

Q. Yes, and an allowance for being next the corner?

A. And the next lot on the basis of $21,000 is $19,500, and there comes the extra five feet on 15th Street, $3,900, that is on a basis of $19,500 for a lot farther up, about the middle of the block.

Q. Will you foot those all up again and see if your calculation is right?

A. Yes. Yes, sir, that is right, $224,600.

Q. But you gave in your direct-examination the value of that plot as $251,550.

A. That is including the plottage 12 per cent.

Q. Then you add something more?

A. Yes, sir, I added $26,950 to the $224,600.

Q. I don't suppose you have sold any property in Irving Place or that neighborhood for some years, have you? A. I have been living there until the last four or five years ago, and I have sold property on 14th Street, on 13th Street, on 15th Street, on 18th Street,
1309 on 19th Street, on 20th Street, on 21st Street, on 23rd Street, on 24th Street, on 28th Street, on 30th Street and all along there.

Q. In the immediate neighborhood of Irving Place?

A. Yes, sir, and in the immediate neighborhood of Irving Place.

Q. Sold any property on Irving Place?

A. No, sir.

Q. How recent are these sales?

A. Well the most recent that I could point out was on 13th Street about six years ago, and I don't think there was anything of more recent date.

Q. Has property increased in value in that neighborhood in that time since your sales?

A. Yes, sir.

Q. How much has this property appreciated in the last ten years?

A. Do you mean how much it increased in value?

Q. Yes.

A. That is hard to say. It depends entirely upon the location.

Q. I am speaking of this particular property, Irving Place?

A. This particular property, well it ought to have increased at least 15 per cent.

Q. And I suppose in the past twenty-two years it has increased in value a good deal more?

A. Irving Place years ago was very high and then it dropped down to almost nothing and went begging, and it required a long time for recuperation, and after it had recuperated it was again under a cloud, and it was only within the last two or three years that Irving Place showed signs of life. I know every house there and could give you the whole history of each of them.

Q. Was it a time of depreciation or a time of appreciation in 1884, that is twenty-two years ago? Is that one of the low times or one of the high times?

A. Well, in 1884 around there property was still low. It had

not reached the values that it had once had when it was a strictly private street in 1872 to 1873. As a general rule the old
1310 values of 1872 prior to the panic were reached in that section in 1883 and 1884, so going farther back you can see it was worth about as much in 1884, as in 1873, for the character of the neighborhood changed entirely, boarding houses and lodging houses had come in where it was private residences formerly, and then the nuisances brought in by Irving Hall and academies and such like was something frightful, because I used to live in 47 and I know I could sleep no nights.

By Mr. MATHEWSON:

Q. How about Tammany Hall

The WITNESS: Tammany Hall I leave out. So all these—and in recent years——

Q. Now, we will get into a respectable neighborhood and go into Hester and Elizabeth Streets.

A. That is fine there. Hester and Elizabeth Streets, I think it has a value of a lot $23,000, an inside lot. The value of a corner lot 50 per cent. more. That would make $33,000. Then I valued the other four lots at $22,000 apiece, that makes $88,000, arriving at a total value of $144,000, to which I add plottage 10 per cent., $14,400, which gives me $158,400. The buildings I valued at $24,000 and I got a grand total of $182,400,

Q. Take that little irregular piece on the next page of the exhibit, Block 972, and give me your method of arriving at the valuation of that piece. Block No. 972, lot 45.

A. Now, that property is a gore and it is virtually a part of old Stuyvesant Street that ran through there from the Bowery to East River, and this diagonal line is about the easterly line of the old Stuyvesant Street. Now, I figured the value of a street lot there, 25 by 100 feet, at $12,000. There are 352 square feet on the street at $4.80, that gives me $6,384 for that strip of land, 13 feet
1311 front by the full depth. I have interior lots at 11,610 square feet, at $1.66 a square foot, that is the equivalent of one-quarter of a front foot, according to the Murray-Hoffmann rule, that is $13,932. That gives me a total of $20,316, to which I add 10 per cent., $2,031, which gives me $22,347.

Q. What do you add that 10 per cent. for?

A. That 10 per cent. I added for plottage because, small as it is, it is of great value to all these people that own these short lots. You control all the lots here in the front away back here. That is what I allowed plottage for. I would not have done so otherwise.

By Mr. MATHEWSON:

Q. All the short lots facing on 15th Street, do you mean?

A. No, there is only 13 feet on 15th Street, but it runs southeasterly and all the lots adjoining to this 13 feet have only a very limited depth in some places only a fraction, no depth to them at all, so there is an additional element of value in this gore.

By Mr. PAGE:

Q. If you were valuing the property at 15th Street you would value that at an additional price because it controlled the frontage of these rear lots, wouldn't you?

A. No, that is not necessary.

Q. I know it is not necessary, but would you not make such an allowance?

A. Not on a small piece like that, on a 13 foot lot, I certainly would not add plottage.

Q. I am not speaking of a 13 foot lot, but supposing you were valuing this property which is not included here but in the front of that portion of the gore which is the rear here?

A. I would add plottage there.

1312 Q. So if you were valuing that, you would also add plottage because that controls this?

A. Yes, sir. That is always the great difficulty in straightening out lines, that both sides want more than the property is worth.

Q. And you have made that allowance so much more than this property is worth——

A. I did not make any allowance more than it is worth. I make the allowance what it is worth according to my judgment.

Adjourned to 10:30 A. M., August 28, 1906.

Last Exhibits:

Complainant's 233.
State's N.
City's 34.

1313 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, TUESDAY, *August 28th*, 1906—10:30 a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Meade, Mr. Page, Mr. Burr.

1314 EDMUND C. PREISS resumed.

Mr. MATHEWSON: Before you begin, Senator, I believe the witness desires to make a correction in his testimony.

The WITNESS: The valuation for Block No. 991, lot 26, which appears on page 1293, ought to be $157,690, in place of $213,165.

By Mr. MATHEWSON:

Q. Was that a reappraisal or the result of a clerical error?
A. That was a clerical error, by my looking at the different number of the blocks here.
Q. Will you now state the total of your valuation of the property to which you have testified, which you had not totalized yesterday?
A. Yes. It is $14,305,911.
Q. That includes no bulkhead rights and no land under water outside bulkhead lines?
A. It does not.

By Mr. PAGE:

Q. Does that include the value of the buildings?
A. There are no buildings there.

By Mr. MATHEWSON:

Q. The buildings to which you testified yesterday, the Senator means?
A. Oh, yes. In this total amount the buildings I have testified to are included.

Cross-examination continued by Mr. PAGE:

Q. Will you take Block 985 on East 17th and 18th Streets, between Avenues D and C.
A. Yes, I have given the total value of Block 985 at $261,800. That is on the basis of 28 lots 25 by 92 feet each at $8500,
1315 making $238,000, plus 10 per cent., or $23,800, makes $261,800.
Q. That is ten per cent. for plottage?
A. Ten per cent. for plottage, yes, sir.
Q. Now take Block 982, lot 13.
A. Block 982, lot 13, I have put that at $430,760.
Q. How did you arrive at that result?
A. This block, being 206 feet 6, I have estimated the two corner lots as being 28 feet 3 inches by 100 feet and allowed the inside lots to remain 25 by 100 because in blocks which have an extra size over and above the 200 feet and which are all in one hand, the corner lots are generally allowed to absorb the difference between the 25-foot lot and the balance, so I made the corner lots 28 feet 3 and the inside lots 25. Now that is on inside lots at $11,000 apiece, with an addition of 50 per cent. to the corner lots, and an addition of 3 feet and 3 inches extra would make the corner lot $18,000 on 14th Street. It would make the corner lot on 15th Street $16,000. The two avenue lots adjoining both corners at $12,000 is $24,000. The four inside avenue lots at $11,000 would be $44,000. Now I have thirteen lots on 14th Street, each 25 by 103 feet 3 inches at $12,000, that would make $156,000. I have nine extra feet at $440, that would make $3,600. Now I have thirteen lots on 15th Street at $10,000, which would be $130,000. Then I have nine additional

feet at $400, which is $3,600. That makes altogether $391,600, to which I have added a plottage of 10 per cent., which is $39,160, thus arriving at $430,760.

Q. Take Block 987, which is the next, I believe.

A. 989. I have given a total value of $318,868——

Q. No, wait a minute.

A. No, that is for lot 1, $182,820——

Mr. MATHEWSON: No, that is not right.

Mr. PAGE: I think it is.

1316 The WITNESS: I have added the two items of the easterly front of Avenue C between 15th and 16th Streets with the plot on Avenue D between 15th and 16th Streets, putting the two figures together, and I am going to give it to you now.

Mr. MATHEWSON: There are two big plots there.

The WITNESS: Well, you can have it separate. Lot No. 1, $182,820. That is on the following basis: Here again I have allowed 28 feet 3 inchesx100 feet, corner.

The MASTER: Yesterday he said it was $233,481.

The WITNESS: No, that is 991.

Mr. PAGE: 991 he has got $182,820.

The MASTER: That ought to be corrected then on the top of page 1293.

Mr. MATHEWSON: Yes. State what the valuation of Lot No. 1 is.

The WITNESS: $182,820. That is the corner of 15th Street, taking the basis of an inside lot on Avenue C. at $9,000. Now, I have added to the corner 50 per cent. and allowed the balance for the extra 3 feet 3 inches, arriving at a conclusion of $14,600 for the 15th Street corner and $14,600 for the 16th Street corner. For the two adjoining lots adjoining the corner each on one corner at $10,000, $20,000; four inside avenue lots at $9,000 is $36,000; five lots on 15th Street at $7,500, $37,500; five lots on 16th Street at the same value, $37,500; and ten extra feet on each of the two streets at the basis of $300, $6,000. That, $166,200, with ten per cent. plottage, $16,620, makes $182,820. Now, for lot 26, block

1317 989, I have put that down here at $157,690.

Q. Now, you are giving——

The MASTER: Is that the same as he gave before?

The WITNESS: No, I put that lot down at $136,048.

The MASTER: On page 1293 that ought to be corrected. That was the lot he valued yesterday at $143,678.

Mr. MATHEWSON: No, that is right, at the top of page 1294.

The MASTER: What is this $143,678 on page 1293? I am referring to the testimony. That is what he corrected on the top of the next page?

Mr. MATHEWSON: Yes, that is right.

The MASTER: Cross that out on the top of page 1293, as he corrected it on the top of page 1294.

Mr. MATHEWSON: I ought to say in behalf of the witness that he had arranged his valuation according to the block numbers beginning with the lowest block number and going up numerically, which

was an entirely different order from that taken by Mr. Wheelock, and at the last moment I asked him if he would not rearrange his figures, putting them in the order they appear on Exhibit 48, and he put them down hastily and these clerical errors were the result and should be placed on my shoulders rather than on the witness'. I thought it would be more convenient to us to have him follow the same order.

The WITNESS: Lot 26, Block 989. I have valued the northwest corner on Avenue D and 15th Street, 28 feet 3 inches by 100
1318 feet, at $12,000; the southwest corner of 16th Street, 28 feet by 100 feet, $12,000; the two lots adjoining the avenue corners at $9,000 each, $18,000; the four inside avenue lots at $8,000 is $32,000; six street lots at $7,000 is $42,000; 16 extra feet on each street, $7,680. That is, $123,680. Plus 10 per cent., $12,368, gives $136,048.

Q. Block 988, lot No. 1?

A. 991 you mean.

Q. Oh, haven't you given that?

A. No. 991, lot 1. I valued that whole at $233,481. Now the analysis of that is the folowing: Northeast corner of Avenue D and 14th Street, 28 feet 6 inches by 100 feet, at $14,000; the southeast corner of 15th Street, the same dimensions, at $11,500; the two lots on the avenue adjoining each corner, $9,000, makes $18,000; the four inside lots at $8,000 make $32,000; then six lots on 14th Street at $8,000 is $48,000; six lots on 15th Street, at $6,000 is $36,000. Now there is an irregular frontage left on Tomkins Street which amounts to 12,803 square feet at $3.33 a foot, that makes $42,649. Now I put 10 per cent. on to that, $20,214; that gives me $222,363. Now this frontage having a water front on the opposite side of Tompkins Street, I have added to the land value of the Tompkins Street front on the basis of $222,363, 5 per cent. for the conjunction of the two plots.

Mr. MATHEWSON: With the water front?

The WITNESS: Yes, from the fact that the water front opposite belongs to that upland. That is $11,118. The total of which is $233,481.

Q. Now you say the avenue lots would be 100 feet?

A. Yes.

Q. On 15th Street?

A. Yes.

Q. And then you take 6 lots?

A. I have made it this way here (indicating). I have taken 105 feet 10 inches on 14th Street here and I have taken 18 feet 6 inches here.

1319 Mr. MATHEWSON: What is "here"?

The WITNESS: On 15th Street. I have made that 12,803 square feet on Tompkins Street. I have added the lots here to make it 100 feet.

The MASTER: Where?

The WITNESS: On 15th Street, so that I arrive here at 12,800 square feet at $3.33, that is $42,649 for conjunction. If I lay out

that property as it is in a block 206 feet on the Avenue by 250 feet on each street, then I retain here 18 feet 6 inches on 15th Street.

By the MASTER:

Q. You had a square block?

A. I had a square block 250 feet. I have divided that block to ease the computation. I have made the block here 206 feet by 250 and then on the balance of the block, as it would be 18 feet 6 inches by 214 feet 2½ inches on Tompkins Street and 105 feet on 14th Street. I took the number of square feet and appraised it according to the value of the Avenue D lots, and for the purpose of establishing the value of the connection—nobody would buy this property 18 feet 6 inches by 105 feet 10 inches—I have added as much ground here from this 250 feet as necessary. From this 250 feet I took off as much ground as to make it 100 feet, so it would be 100 feet on 15th Street and 105 feet on 14th Street, and on that I have allowed 5 per cent. Not on the whole block, only for the front.

By Mr. MATHEWSON:

Q. 5 per cent. for that part on account of the property across the way?

A. On account of the conjunction with the water front there.

1320 By Mr. PAGE:

Q. Now if I understand your method of arriving at that result in order to get the number of square feet you made an arbitrary——

A. I made a subdivision of the block.

Q. Well, but you had already allowed, had you not, for that 100 feet—81 feet 6 inches on 15th Street, already hadn't you?

A. But not in the computation of the value for the conjunction.

Q. No, I know, not in the value of the property for the conjunction, but you had already allowed in your valuation for the 81 feet 6 inches on 15th Street?

A. It is 18 feet.

Q. Well, 18 feet 6 inches and add 81 feet 6 inches and you get 100 feet. You said you had made that frontage 100 feet.

A. Yes, I have added for the purpose of computing the value of the connection with the water front as much land west of the 18 feet 6 inches surplus on 15th Street from the size I took, 250 feet, from the square size, as would be necessary to get a depth of the southwest corner of 15th Street and Tompkins Street, 100 feet on 15th Street, so that I have made for the purpose of computing the conjunction value this way (indicating).

Q. Yes. That was merely for the purpose of computing conjunction value and not for the purpose of ascertaining the number of square feet?

A. No, the number of square feet I ascertained by simply computing the dimensions as I have them. 18 feet 6 inches on 15th Street x 224 feet on Tompkins Street by 105 feet 10 inches on 14th Street and 206 feet running north to 15th Street. That piece in itself is 12,803 square feet. That was for the purpose of establishing the land value of the whole block and for the purpose of estab-

lishing only the conjunction with the water front, I had to dissect that and add to this 12,803 square feet as many feet on
1321 15th Street as would be necessary to make it 100 feet deep. That is what I mean.

Q. I understand. Now, proceed with Block 991, lot No. 26.

A. Block No. 991, lot 26. I have given the value to-day on this lot 26 as $157,690. Now, I arrived at that in the following manner: I allowed for the northeast corner of 15th Street and Avenue D, 28 feet 6 inches by 103 feet 3 inches, $11,500; for the southeast corner of 16th Street and Avenue D, the same dimensions, $11,500; for the two lots adjoining the corner on the avenue, $9,000 each, which would be $18,000; four inside avenue lots at $8,000 would be $32,000; then two lots on 15th Street 25 feet x 103 feet 3 inches at $8,000, $16,000; five extra feet on 16th Street at 3.20 is $1,600; two lots on 16th Street at $7,000 is $14,000; five extra feet at $2.80 a foot on 16th Street is $1,400. Now, here again I come to the same rule and same method. I have made that run through to make it a rectangular block in front and computed for the balance of the block with the oblong line on Tompkins Street the number of square feet. The number of square feet is 9,035. At a valuation of $3.50 a square foot it brings it to $31,122. The total amount of this would be $137,122, to which I add $13,712, making it altogether $150,834, to which I have added the value of the conjunction on the basis of this being a very short block and it being almost next to impossible to omit any parcel of it to make it valuable for the water front, I have allowed 5 per cent. on the whole piece, that amounts to $6,856. That is 5 per cent. bulkhead connection on the value of $137,122. That is the value without the 10 per cent. plottage. That is $157,690.

Q. Now, if you will take Block 988, lot 1, that being the entire block.

A. Block 988, the whole block I valued it at $574,200 in the following manner. The Avenue C front between 14th and 15th
1322 Streets, the same as it is in Block 982 on the west side of Avenue C between 14th and 15th Streets, $95,000. Then the northwest corner of Avenue D and 14th Street, 28 feet 3 inches by 100, $13,500; the southwest corner of Avenue D and 15th Street, 23 feet by 100, $12,000; two adjoining lots on the avenue corners, $9,000 each, is $18,000; four inside avenue lots at $8,000 is $32,000; 19 lots on 14th Street at $10,500 is $199,500; 19 lots on 15th Street at $8,000 is $152,000; a total of $522,000, to which I have added a plottage of $52,200, 10 per cent., giving a value of $574,200.

Q. As I understand it, the property on 14th Street which you have valued is covered by buildings, is it not, for gas manufacturing?

A. Gas manufacturing; not included.

Q. Your valuation of the land is what the land would be worth if those buildings were removed?

A. The land value without any buildings on.

Q. How much does this building on there depreciate the value of the land as it stands to-day?

A. That I cannot tell you, because I do not know the value of the buildings.

Q. I know; but if you valued these as lots, you would have to remove the buildings?

A. Yes.

Q. To get what they would be worth without any buildings on them?

A. In that case you would have to give a much higher figure probably. I give you the value as it is to-day, provided possession of the land is given. What you do with the buildings—that is a matter that does not enter into my calculations at all.

Q. You are valuing what the vacant plot of ground would be worth in that particular locality?

A. This block of ground would be worth in this locality, yes.

Q. Without any buildings on?

A. Without any buildings on.

1323 Q. Now, if they were to sell them, in their present condition, they would have to pay something for taking away these buildings, would they not?

A. They might use the material. There is nobody else that would buy these buildings. That is a matter that I cannot judge about, what they would do with the buildings in that case.

Q. I am asking, what would be the effect on the land having those buildings on there?

A. It would be worth just as much to-day as it is, because nobody will buy the land with the buildings on. They would buy the land for the purpose of improving, and not with the gas houses on.

Q. Therefore, for the purposes of sale those gas houses on there are a detriment, are they not?

A. The gas houses are a detriment, certainly.

Q. How does the gas house being there affect the property on the other side of 14th Street?

A. Unfavorably.

Q. Unfavorably?

A. Yes.

Q. And you have given the values that you have as to the value of that land, if there was no gas house in the neighborhood?

A. I have given the value not as if there was no gas house, but as they are, provided they are going to be removed, or portions of them. You may for instance sell a portion of the buildings and sell the avenue front, and retain the gas house in the rear, and somebody who has a chemical factory or some such thing might not object to the presence of the gas house in the rear, and would buy that avenue front and put up a big building there.

Q. If a portion of the plant was removed and that portion remained where gas was manufactured, would the value of the property that was cleared be the same as you have given here to-day, or would be less by reason of the proximity to the gas house?

A. That is what it would bring, and it would bring more;

1324 it would not be worth less at all for that purpose.

Q. You think then that the gas house adjoining the property would add to its value?

A. I do not.

Q. You stated that it would be worth more than what you have given here?

A. No, I say if that gas house was to be removed from the rear, if you remove the gas house and leave only the block front, say 200 x 100 or 150, and sell that; those are my figures here. If you were to sell the whole block simultaneously you would get considerably more for the land than I have valued it, because it would remove what is called a nuisance and an eyesore, so my values would be quite inadequate under that condition of affairs.

Q. Then you have not valued, as you have just testified, the land as it would be with the buildings all removed?

A. I have, but conditionally. For instance, if a man were to come and buy that whole plot to-day and the gas houses were to be removed, my figures would be altogether too low, but if a man would come along and buy only a portion, not objecting to the presence of the gas houses, or what might be left of them, then my figures are correct.

Q. Then, as I understand it, your figures are based on a partial removal of the plant and with the gas plant in operation?

A. To some extent, yes, sir.

Q. And it is not the value of the land with the building entirely removed, as you have testified here a few moments ago?

A. It is, conditionally, but not simultaneously, not the whole block.

Q. As I understand it, your value of the land is a progressive one; as the buildings are torn down your value attaches, and when the buildings are all removed then there would be a still greater value?

A. There would be on account of the whole neighborhood being benefited and attaining an entirely different character.

1325 Q. Now, we are getting at something. That is, by the removal of this gas plant, it being a nuisance, the entire neighborhood would benefit and this property would increase in value also?

A. Yes, to some extent, yes. It might possibly bring a great deal more than I have testified.

Q. And if they removed these buildings entirely then they would get a still greater appreciation of value than you have testified to to-day.

A. Yes, if it was removed in the whole block, all buildings together at the same time, but if there are buildings remaining——

Q. (Interrupting.) I know, but take that condition, remove this manufacturing plant entirely, how much would you add to the value of the property?

A. That I cannot tell because I do not know when that is going to happen.

Q. Never mind; suppose it happens to-day. We are supposing now; I do not know if anything is going to happen.

Mr. MATHEWSON: Well, what do you mean, if they were all cleared at once?

Mr. PAGE: I mean, if you wiped out your manufacturing plant

and removed to Astoria, as you claim you are going to, how much would that increase the value of that land?

A. That might in all probability go to 15 per cent. higher up above my figures, if immediately cleared out.

Q. You think it would add 15 per cent. to the value you have given?

A. I mean if the whole business was removed simultaneously, and the character entirely changed. I believe my figures would be too low, and I believe that you could get 15 per cent. at least more for the property than I have valued it to-day on the basis of the gradual removal of the buildings, not simultaneously.

1326 Q. Take Block 688, lot 21, on Exhibit 49?

A. That is the block, 16th to 17th Streets, 10th and 11th Avenues; I value this property at $838,200. These blocks here are only 184 feet in depth, so they are not figured on the value of a 25-foot lot, but on the value of what a 23-foot lot to-day is. I have simply taken the lots as they have been laid out, as they have existed all the time, as if 25-foot lots never existed.

Q. You mean on the avenue?

A. Yes. I have taken the northwest corner of 16th Street and 10th Avenue, 23x100, for $19,500. The next lot to the corner at $14,000; the 4 next ones at $13,000 apiece, $52,000. The next one, $14,000, and the southwest corner of 17th Street, $19,500, which is the same as 16th Street. Then, I have 44 street lots. Now, those lots are 25x92. That gives $484,000, and 44 at $11,000, $484,000; that means that the lots run through from street to street. Then, the 11th Avenue front I have put on the same basis as the 10th Avenue front, less 10 per cent. Now, the 10th Avenue front altogether was $119,000; take 10 per cent. off for the 11th Avenue front, is $111,000. The total amount would be $762,000, to which I add 10 per cent. for plottage, $76,200, arriving at the total of $838,200.

Q. Will you turn to page 3 of the exhibit and give me the value of that plot as shown there, what is left of it after the marginal street has been taken off?

Mr. MATHEWSON: As now left, since the improvement, you mean?
Mr. PAGE: Yes, have you figured that?

A. The total value of this after the condemnation is $382,793.

1327 By Mr. MATHEWSON:

Q. What was the original length of the block?
A. 800 feet.
Q. And what is it now?
A. It is 286.20 feet on 16th Street and 357.29 feet on 17th Street.

By Mr. PAGE:

Q. That is, you would deduct for the property that has been taken $455,407?
A. Yes.

Mr. MATHEWSON: It is hardly possible to proceed on a method of

deduction, because sometimes after an improvement there is less land than before, but that less land is worth more than the original plot.

Mr. PAGE: I know; I suppose he has valued that, and I suppose he is giving an approximate valuation.

Q. Now, we will take the block above, No. 689; the value of that first, as you have it on Exhibit 49, is what?

A. The Block No. 689, on the former exhibit, is the same as Block No. 688, $838,200.

Mr. MATHEWSON: Arrived at in the same method?

A. (Continuing:) Yes, the same method. The blocks are of the same dimensions.

Q. And the property is the same value?

A. Yes.

Q. Now take Block No. 689 as it is to-day.

A. Block 689 with the marginal street there is to-day, $457,750, making a difference of $380,450.

Q. Now, if you will take Block No. 690.

A. Block No. 690 is worth, in the original size——

Q. As it is on Exhibit 49?

A. Yes, $452,100.

Q. State how you arrive at that.

A. I have taken the 10th Avenue front as heretofore.

1328 Q. Probably I might shorten that. Are the lots of the same value of this plot as in 689 and 688?

A. No, not precisely.

Q. Then give the way you have figured it.

A. I have taken the 10th Avenue front at $119,000, the two adjoining lots at $11,000 each, are $22,000, and the other lots, 16 lots on 18th Street, at $10,000 each, is $160,000, and there are only eleven lots on 19th Street, because there are different lots out in that block, $110,000. That will give a total of $411,000, to which I have added plottage of 10 per cent., $41,100, arriving at a value of $452,100. That is the property in its former shape.

Q. Now, turn to Exhibit 45.

Mr. MATHEWSON: That takes just a little corner off of that?

A. With the marginal street out, yes; that is $465,973. That is the 10th Avenue front as above; that is on the marginal street, 17,429.71 square feet on the marginal street at $6.46 per foot, $112,592. Two lots at $11,000 would be $22,000, and 17 lots at $10,000 would be $170,000. That would be $423,592; now, with 10 per cent. added to that, $42,359, is $465,951.

Q. The fact that the marginal street now runs along the end of this property, whereas it was an interior lot before; this improvement has increased the value rather than diminished it; is that right?

A. Well, there is a case where it actually has, certainly.

Q. This particular plot is worth more since that improvement has been made than it was before, isn't it?

A. Well, computing the same number of square feet contained in the block, yes, sir.

Q. Well, in other words, you have got another frontage?

1329 A. You have got another frontage; but you had a frontage; but you had a frontage before that, too.

Q. Then it would not add anything, would it?

A. Well, it has not added anything in one sense of the word; when you figure the total amount as a loss; that is what the award is claimed for, for the number of square feet or the number of lots that has been taken for the marginal improvement.

Br. Mr. MATHEWSON:

Q. Well, the value of the marginal street on the west end more than offsets the loss of that little gore, which the marginal street takes?

A. Yes.

Q. So it makes what is left worth more with the marginal street than the whole plot was worth before the marginal street was put through?

A. Not in this lot No. 698. Oh, yes, it does; you are right, for the reason that you have only taken a little angle out there, and instead of this little angle that you have lost, well, about 800 or 900 square feet, instead of that you have got a whole avenue front here, and that land has actually gained; that block has gained.

By Mr. PAGE:

Q. No-, Block 691.

A. In the original size I put that as $356,400, putting the 11th Avenue front as I have taken the 11th Avenue front in the other blocks below, $111,000; then a lot 25 by 92 on 20th Street, $12,000; then nine additional lots on 20th Street, at 11th Avenue is $99,000. Then a lot 25 by 100 on 19th Street is $11,000; nine lots on 19th Street at $10,000, $90,000; the total would be $324,000, plus 10 per cent. for plottage, $32,400, makes $356,400.

Q. Are you through with the plot as it was originally?

A. With the original size of this plot, yes.

1330 Q. Now take Exhibit 48, the same property as shown after the improvement has been made.

A. After the improvement has taken place there is space left of 20,789 square feet, on the marginal street, at $6.75 per square foot; that is $139,731. There is left 19 feet on 19th Street at a value of $400 per front foot, the basis being $10,000 for a full lot; that is $7,600. Then there are two lots on 20th Street at $11,000, $22,000; then there is 15 feet on 20th Street extra at $404 per front foot, on the basis of $11,000 per full lot. That would be $6,060, a total of $175,391. Add 10 per cent., $17,539, will give you $192,930. That would show an addition of $163,470.

Q. Now, turning to Exhibit No. 49, we have block No. 666, lot 3.

A. That is an irregular sized lot here, referring to lot No. 3, between 11th Avenue and 13th Avenue, from 16th to 17th Street; that contains 8,420.8 square feet. That is on the basis of the avenue front of $6.46, $54,390. There is added to that 10 per cent. for the double frontage on the 10th Avenue basis; in other words, I have

taken the value of a front foot on 10th Avenue here and I have applied the same value here (indicating) and I allow an advance of 10 per cent. on the number of square feet on account of the double frontage, these lots running from one avenue to the other. I computed the value of that and I have added a plottage of 10 per cent. on that.

Q. Plottage on a lot 24 feet on one end and 66.11 feet on the other?

A. Yes, but it is a whole block in itself, and has a connection with the water front.

Q. But plottage is for a large piece of property combined. You have practically got only two lots here.

A. That triangle—you have to pay it on account of its shape. For instance, take Broadway and 23rd Street, see what it is, and if you want to buy that as a whole lot you have to pay extra
1331 value, not what the lots would be according to the number of square feet represented in that triangle—or whatever it is——

Q. Well, make it triangular value.

A. Whatever it is. Now, there is an addition of 10 per cent. for plottage and 5 per cent. for the connections. That means for the conjunction with the water front here. That is $13,598, a total of $67,991.

Q. Now, if you will take the next, which is lot 12, just above, Block No. 666.

A. That contains 18,628.16 square feet; computed at the same basis, $6.46 as above, $204,379. The double frontage, 10 per cent., is $20,337; 10 per cent. for plottage and 5 per cent. for the conjunction is $30,406, leaving a toal of $224,122.

Q. If you wish to arrive at the value of the property as it is now shown on Exhibit 48, then you would deduct entirely the value of lots 3 and 12, would you?

A. I certainly would.

Q. Now, take Block 716, lot 14.

A. Block 716, lot 14, is a plot of 75 feet on the north side of 18th Street. Now I have valued this property, the land value, including the buildings, at $43,875, analyzed as follows: Three lots at $12,500 is $37,500, 5 per cent. plottage added is $1,875, which gives $39,375, plus values of buildings, $4,500, which is $43,875.

Q. Now take Block 715, lots 51 to 59.

A. 715 is on the same street, on the south side, 150 feet east of 10th Avenue. There are nine lots altogether at $12,250, that is $110,250, and a plottage of 10 per cent., $11,025, making a total of $121,750.

Q. Now, turn to the next page of Exhibit 48, block 951, lot 35.

A. I have valued that at $85,820. There are altogether 7 and 1-25th lots at $8,500 each, that is $59,840, and a plottage of 10 per cent., $5,984, which is a total of $65,820, to which I have added the value of the buildings at $20,000, making $85,820.

1332 Q. Now take block 952, lots 7, 29, 30 and 32.

A. Block 952, the total value is $438,530, analyzed as follows: For the northwest corner of 20th Street and Avenue A——

Mr. MATHEWSON: Northeast you mean, don't you?

A. No, sir. Block 952 is the west corner. It is 184 feet by 517. It is the northwest corner. The northwest corner of Avenue A and 20th Street, lot 23 by 100, an inside lot, being on the basis of $12,750, plus 50 per cent. for the corner, being $19,150. The next lot adjoining the corner, 23 by 100, is $14,000. The next four lots valued at $12,750 is $51,000. The next lot is $14,000, and the corner of 21st Street and Avenue A is $19,150. Now there are 16 lots 25 by 92 on the North side of 20th Street at $8,500 a lot, which makes $136,000. There are 17 extra feet at $340 per front foot, which makes $5,786. There are 16 lots 25 feet by 92 on 21st Street at $8,000, which is $128,000, and 17 extra feet at $280, which is $4,760. The land value is $391,846, plus 10 per cent. or $39,184, which makes a total of $431,030, to which I add the value of the buildings at $7,500, arriving at the total of $438,530.

Q. Now take block 953, lot 1.

A. Block 953 is the entire block on Avenue A and First Avenue and 21st and 22d Streets, I value that at $619,136, analyzed as follows: For the Northeast corner of First Avenue and 21st Street, 24 feet 7 inches by 109, $25,500. The lot adjoining, $18,000. The next four lots at $17,000, $68,000. For the next lot $18,000. And for the corner of 22d Street, 24 feet 7 inches by 100 feet, $25,500. Now for the Avenue A front I have allowed the same as I did in block 952. That means the total of the First Avenue front is $155,000. The Avenue A front is $117,300. And Thirty-third Street lots at $8,500 a lot is $280,500, bringing it up to
1333 $552,800, plus 12 per cent. for plottage here, which is $66,336, making a grand total of $619,136.

Q. Now take Block 979.

A. I have valued that at $570,080, the entire block. For the northeast corner of Avenue A and 21st Street, 24 feet 7 by 100, $19,500. For the southeast corner of Avenue A and 22nd Street, $20,800. For the two adjoining lots on the avenue, each $14,000, making $28,000. For the 4 inside lots on the avenue, at $13,000, being $52,000. There are 19 4-5 lots on 22nd Street at $8,000, making $158,400. The same number of lots on 21st Street at $7,000 is $138,600. That is figured on the same principle here, making the block rectangular here (indicating), and allowing per square foot for the marginal front the same as before. There are 6,599 square feet on the marginal street, which on the basis of the Avenue A front would be $6.10 per square foot. That is $100,955. That would make altogether $518,255, plus 10 per cent., or $51,825, making $570,080.

Q. 10 per cent. is for plottage.

A. Yes, sir.

Q. Now take Block 978.

A. Block 978 I value at $539,474.

Q. With buildings?

A. Yes. The northeast corner of Avenue A, 23 by 100, the southeast corner, 23 by 100, and the plot 46 feet by 100 adjoining the corner of 20th Street, and the plot 69 feet on the avenue by 100 on

21st Street, which on account of this lot being changed I have made the avenue front here 100 feet deep, dissected the blocks, laid it out the same as it would be in case of a sale; the avenue lots would be sold 100 feet and not as they are, 70. That would be same as Block 952 opposite on Avenue A, on the basis of $12,750 per lot less the value of the plot 23 by 70 on Avenue A, which is out; altogether 16,100 square feet at $6.30, or $10,200. That is the value for that piece of property which does not belong to the complain-t.

1334 That would be $117,300, less the value of that lot out, or $10,200, which is $107,100. Now the northwest corner of Avenue B and 20th Street I have estimated on the basis of 23 x 100, adding 40 to the value of inside lots, making $14,000. The southwest corner of 21st Street the same, $14,000. Two adjoining lots at $11,000 is $22,000. Four inside avenue lots at $10,000 is $40,000. 14 lots on 20th Street at $8,000 is $112,000. There are 16 extra feet on 20th Street at $5,120. There are 14 lots on 21st Street at $8,000, making $112,000. There are 16 extra feet on 21st Street at $5,120. That will bring it up to $471,340, plus 10 per cent., which is $47,134, or a total of $518,474, plus the value of the buildings at $21,000, which is $539,474.

Q. Block 987 is the next?

A. 987 is the marginal Street, Avenue B, 20th and 21st Streets. There are altogether 29,745 square feet in that plot at $3.50; that is $104,000. 10 per cent. added to it is $10,400, which makes $114,400.

By Mr. MATHEWSON:

Q. What is the 10 per cent. for?

A. Plottage.

By Mr. PAGE:

Q. I suppose the same condition exists here. If this gas plant were removed this property would be worth about 15 per cent. more, would it?

A. Yes, sir. If it was removed in its entirety.

Q. Yes, in its entirety. Now take Block 1090 on page 5 of the exhibit, lot 23?

A. There are 6 lots in that plot, 24 x 100 feet 5 inches each, at $11,000, which is $66,000, plus 10 per cent. for plottage is $6,600, which makes a total value of $72,600.

Q. Take the next block, 1071, lots 10 to 13.

A. 1071 I valued at $57,200. There are four lots at

1335 $13,000 each, which makes $52,000, plus 10 per cent. plottage, or $5,200, making $57,200.

Q. Then take block 1070.

A. 1070, there are eight lots at $9,500, which is $76,000. There is added for plottage $7,600, making $83,600.

Q. Now, the large block 1089.

A. 1089, that is a block between 41st and 42nd Streets. I value that block at $957,600, as follows: Northwest corner of 41st Street and 11th Avenue, 24 feet 7 by 100, $18,000. The lot adjoining the

corner, $13,000. The four next lots at $12,000 each, $48,000. The next lot $13,000, and the southwest corner of 42nd Street I allow 75 per cent. over the value of the inside lot for that, which is $21,000. There are thirty-seven lots on 42nd Street at $12,000 each, which is $444,000. There is one lot adjoining the corner, $13,000. There are thirty-seven lots on 41st Street at $7,500, which is $276,500; and one lot adjoining the corner $8,500, makes altogether $855,000; 12 per cent. plottage to that is $102,600 or a total of $957,600.

Q. That property and the blocks 1090, 1071 and 1070 would all be increased in value by the removal of the gas plant that is on this property which you last testified to?

A. More or less, yes, sir, because now, for instance, that 42nd Street, block 1071, that would only slightly be benefited and still it would be benefited, so would the others.

Q. How much?

A. I couldn't tell you that because I can't say when you are going to do that, it is all of a speculative nature or character, and I cannot discount the future.

Q. If there wasn't any gas plant there to-day how much would it be worth?

A. About 10 or 15 per cent. anyway.

Q. And 1090 would be worth a good deal more, would it?

A. Yes, sir.

Q. How much would that be worth?

A. About 15 per cent. easily.

1336 Q. And 1089 would be advanced?

A. Yes. 1089 would be largely benefited, perhaps 20 per cent.

Q. Take block 1092 on page 6 of the exhibit.

A. 44th and 45th Streets. I value that at $647,150. That is 38 lots on 44th Street at $8,000 per lot, which is $304,000; 37 lots on 45th Street at $7,500 is $277,500, a total of $581,500, plus 10 per cent. plottage, $58,150, which makes a total of $639,650, to which I add the value of buildings $7,500, making a total of $647,150.

Q. Now, take block 1093.

A. 1093, there are 33 lots on 45th Street at $7,500, which is $247,500; and 30 lots on 46th Street at $8,000, is $240,000, a total of $487,500, plus plottage of 12 per cent., or $58,500, making a total of $546,000.

Q. What size lots are the 30 on 46th Street?

A. Those lots are 25 by 100 feet 5 inches. The width of the block is 200 feet 10 inches there.

Q. But I call your attention to the fact that the dimensions as given on this map are only 500 feet on 46th Street. That would be 20 lots instead of 30, wouldn't it?

A. Yes, but where are the 250 feet to come in to the easterly line of the bulkhead?

Q. Oh, you have taken then the land in the marginal street?

A. Yes, take the land to the bulkhead line or the land marked

blue on this diagram. I have taken the 250 feet eventually to be the 12th Avenue marginal street.

Q. If the company does not own that land in the bulkhead line on the part marked blue on this map, then you would have to deduct the value of 10 lots, would you?

A. Yes, sir.

Mr. MATHEWSON: No, not so much as that.

Mr. PAGE: Well, the value of 20 lots, 10 on each street.

The WITNESS: Ten on each street, that is 20 lots per block of 250 x 200.

1337 Mr. MATHEWSON: Between the present bulkhead line and the westerly margin of the projected avenue, there are about 70 feet, as I recollect it, which even on that hypothesis would belong to the company. So that it would not take out the whole 250 feet.

Mr. PAGE: But the difference would be that 65 feet would be land under water. It would not be worth much.

Mr. MATHEWSON: No, it is right next to the bulkhead line. I do not think it is land under water. I think it is land all built up.

Q. This property is also occupied as a gas manufacturing plant, isn't it?

A. Yes, sir.

Q. And if that was absolutely removed how much would it increase the value of this property?

A. About 17 per cent. That is a mere general statement on my part, you know, because I cannot tell you precisely. It would depend upon the condition of the market and the number of people that are in the market for just such property as that.

Q. Well, I suppose the number would be about the same wouldn't it, as to-day?

A. No. I believe that they would first try to sell it as a very large plot for manufacturing purposes and not for tenement houses, and it would have to be divided up into different plots. Those are all speculative things, I cannot discount them, but that is a general idea of mine that it would be about 15 per cent. anyway, 10 or 15 per cent., as the case might be.

Q. Take block 1457 next.

A. There are 19 4-5 of a lot in the street at $8,000 a lot, that is $168,400, and the plottage added is $16,840, being 10 per cent., which makes $185,240.

Q. Take the next block, 1455?

A. Block 1455 I have valued at $222,750. That is analyzed as follows: The northwest corner of Avenue A and 60th Street,

1338 25 feet 5 by 100 feet, at $15,000. The southwest corner of 61st Street, $15,000. Two lots adjoining the corner at $11,000 is $22,000. Four inside avenue lots at $10,000 is $40,000, and seventeen street lots at $6,500, that means in this number of seventeen street lots is included the 13 extra feet on each street. It would be only 16 lots and 13 feet on each street. I made it in round figures 17 lots of $6,500, which is $111,500. The total value is

$202,500, with 10 per cent. plottage of $20,250, which is $222,750.

Q. Now take Block 1474.

A. 1474 is the northeast corner of Avenue A and is an irregular plot. You have got the dimensions. There are altogether in that plot 5230 square feet. I took them at $4 a square foot, which is 55 cents less per square foot than it is on the west side of Avenue A, where it is $4.55 a square foot.

Q. Take next Block 1177.

A. Block 1177 is a value of $194,062, divided up as follows: West End Avenue front is the same as I shall give subsequently here as to Block 1157 right opposite, less 10 per cent., that is $87,500. There are 16 street lots at $5,000 each, that is $80,000, and there are 8,835 square feet at $200 a square foot, right on the retaining wall of the Hudson River Railroad Company right there (indicating) at $17,670, that is $176,420, plus 10 per cent. for plottage, or $17,642, making a total of $194,062.

Q. We will take now Block 1157.

A. 1157, that I have valued at $701,680. I valued the northwest corner of Amsterdam Avenue and 65th Street at $25,500; the southwest corner of Amsterdam Avenue and 66th Street, $25,500; the two adjoining avenue lots on the corner, $18,000 each, $36,000; the four inside avenue lots at $17,000 is $68,000. Now, the northeast corner of West End Avenue and 65th Street I value at
1339 $14,250, the southeast corner of 66th Street, $14,250; the two lots adjoining the avenue corners at $10,500 is $21,000; the four inside avenue lots at $9,500 each is $38,000; and forty eight street lots at $8,000 is $384,000. The total value is $626,500, plus twelve per cent. plottage, $75,180, is $701,680.

Q. And Block 1156, lots 45 and 46.

A. 1156 is on the south side here; that I valued at $40,100. There are four lots at $8,000, $32,000. There is five per cent. plottage, which is $1,600, and the value of the buildings is $6,500, making a total of $40,100.

Q. Now, Block 1670.

A. 1670, First Avenue between 98th and 99th Streets. That block I valued at $667,184. The northeast corner of Second Avenue and 98th Street, 25 feet 11 inches x 100 feet, $23,870; the southeast corner of 99th Street and Second Avenue, $23,870; the two lots adjoining the avenue corners at $16,500 each is $33,000. Four inside avenue lots at $14,500 each is $62,000. Now, the northwest corner of First Avenue and 98th Street, $18,480; the southwest corner of 99th Street, $18,480; two adjoining lots to the corners, $13,000 each, is $26,000; the four inside lots at $12,000 is $48,000; and thirty-six street lots at $9,500 is $342,000. Now, on those corners I have allowed fifty per cent. over and above the value of an inside lot. That value would be $595,700 and adding a plottage of twelve per cent., or $71,484, gives a total of $667,184.

Q. Why do you add a plottage of twelve per cent. in this case, where you have been adding ten per cent. heretofore?

A. Well, there is a large block in its entirety with another block in its entirety adjoining owned by the same parties and both on the marginal street, which is a water front street.

Q. Well, they do not both front the marginal street?

A. That is true, but when you have t[illegible] adjoining blocks in one hand and they may be both wanted together for a large con-
1340 cern, there is a larger plottage always computed in such cases than if there is a smaller plot not of a block in its entirety.

By Mr. MATHEWSON:

Q. You mean considered together, they face a marginal street?

The WITNESS: Yes. I took that item into consideration.

Q. I understand your reason now. Now take Block 1692.

A. Block 1692 I have valued at $262,697. That is the east side of First Avenue, the same value as Block 1670 opposite, less 10 per cent., that would be $99,864. Twelve street lots at $6,500 each is $78,000. Twenty extra feet on the street is $5,200. There are 10,100 square feet on the marginal streets, same value as First Avenue front, 98th to 99th street, that is $55,752, which makes $238,816, plus the plottage of $23,881, makes a total of $262,697.

Q. This is also a manufacturing station of the Consolidated Gas Company?

A. Yes, sir.

Q. And these values I suppose of yours you would estimate would increase from 15 to 20 per cent. upon the removal of the plant?

A. If the plant is removed in its entirety right away, yes, sir.

Q. Block 1683 on page 10.

A. 1683, lots 18, 34 and 35 I have valued at $118,800. That is the northwest corner of 111th Street and First Avenue, 25 feet 11 inches by 100 feet, $20,000. The next lot, $13,000; the next lot $12,000, and 7 street lots at $9,000 each is $63,000, a total of $108,000, plus 10 per cent. plottage, $10,800, gives a total of $118,800.

Q. Now take Block 1682.

A. 1682 I valued at $436,700. The northwest corner of 110th Street and First Avenue, 25 feet by 100, $18,000; that is on the basis of $12,000 for an inside lot, plus 50 per cent. The
1341 southwest corner of 111th Street I have made 26 feet 10 inches by 100. As I did in the former case, I have added a surplus of one foot 10 inches to that particular corner because it is right opposite this large public park which has been created and called the Jefferson Park, and on account of that with its extra size it is much more valuable than the lots would be if the difference was divided up and added to each lot. That corner I valued at $20,000. The two adjoining lots on the avenue $13,000 each is $26,000; the next four inside lots at $12,000 each is $48,000; there are thirteen street lots at $9,500, which is $285,000. The total would be $397,000 plus plottage of 10 per cent., $39,700, which would be a total of $436,700.

Q. For use as a gas plant that park does not enhance the value of this property, does it?

A. No, it does not enhance it now at all, but the price I give you is what it is worth to-day.

Q. If the gas plant was not there?

A. Well, if a part of it was removed. If this whole thing is gradually cleared off; for instance, if you are going to sell off portions of it gradually——

Q. If you sold off that corner, then there would be some advantage?

A. Yes, if you want to sell that front with the corner on 111th Street right opposite that park you will get more for it than I have valued it at. That is just the case as it is with the next one. I will bring you a man who will give you more than I have appraised it for.

Q. Go ahead, take block 1704?

A. I valued that at $556,827. That is the First Avenue front, which is the same as block 1682, that is $95,000. The Pleasant Avenue front at the same value, less 10 per cent., $85,500. I have sixteen lots on 110th Street at $6,000, which is $96,000; I have thirteen extra feet on 110th Street at $204 a front foot, that is $2,650. I have sixteen lots on 111th Street at $10,000.
1342 Now those lots are the ones fronting the square, this Jefferson Park. That is $160,000; I have thirteen extra feet there or $5,200. The total is $493,350. I have allowed twelve per cent. plottage on that, that is $58,202, and the total is $556,827.

Q. You have allowed there for the increase in valuation because of its proximity to the park?

A. Yes, fronting on the park and fronting through on the Pleasant Avenue which is also right there a part of the park; you know from 111th Street up. The easterly side of Pleasant Avenue is all taken up by park to the bulkheads. That is a mighty fine block.

Q. Too good a block for a gas plant isn't it?

A. No, sir. If you take that block to-day and sell it for speculative purposes you will get a great deal more that I have appraised it for. I know a man who will give more than I have appraised it for, but still I don't believe it is worth that. That man figures on the resale of the property to build a saloon at a very large increase in value; in other words he expects to buy it with very little money and put a large amount of money out of his pocket into it to build a saloon and take his chances.

Q. Take block 1999?

A. I valued it at $447,700. That is two 12th Avenue corners at $15,000 each, $30,000; two adjoining lots at $11,000 each, $22,000; four inside lots at $10,000 each is $40,000, and 45 Street lots at $7,000 is $315,000; a total of $407,000 to which I added 10 per cent. for plottage $40,700, making a round figure of $447,700.

Q. Now Block 2175?

A. 2175 is a very irregular piece of property on Broadway, formerly Kingsbridge Road, northeast of Elwood Street, and running through to Sherman Avenue. That plot contains 62,523 square feet, about twenty-six full city lots, which at $1.50 per square foot would be worth $103,162 including a plottage of ten per cent. It
1343 means the land without the plottage would be worth $93,784 and a plottage of $9,378.

Q. How much per square foot did you say that was?

A. $1.50 a square foot.

By Mr. MATHEWSON:

Q. How many feet?
A. 62,523 square feet; that is the nearest I can come to it.
Mr. PAGE: That is all I wish to ask.

Cross-examination by Mr. BURR:

Q. How long were you engaged in making this appraisal?
A. It must be between seven and eight weeks now.
Q. It took you all that time, did it?
A. More or less. I went over it twice just to be perfectly satisfied. I walked over every inch of ground.
Q. Where did you take your dimensions from?
A. I took the dimensions from the blue print that I have here.

Mr. MATHEWSON: Exhibit No. 48?
The WITNESS: Yes. Where there was a discrepancy I took it from the city maps, so I have not in every instance followed exactly the dimensions given here in this blue print.

Q. You did not take the dimensions in any event from the deeds themselves, did you?
A. No, sir, from the diagrams furnished me here by the gas company and where I saw, compared with the city maps, that there was a discrepancy, I made inquiries and I was told by the engineer that the discrepancy might possibly be due to their having drawn their diagram according to old deeds and lands actually in possession, whereas the city maps would show more or less.

1344 Q. I notice you made a 5 per cent. allowance for the conjunction of the land with the bulkhead?
A. Yes, sir.
Q. You said the other experts allowed it to the bulkheads itself.
A. Well, that is optional. I believe that when you own a plot of ground with water front opposite the real value of the water front goes in the land and not the land value to the water front.
Q. Well, that 5 per cent. would not be allowed if the street was opened and in use between the bulkhead and the land on the other side?
A. I have not allowed 5 per cent. for the conjunction in any instance where there is a street to run through. There I have omitted the plottage altogether. I have omitted plottage on 41st and 42d Streets, on 44th and 45th Streets, and 45th and 46th Streets, because it does not run through there. I have allowed nothing for plottage there, but that land runs out under water.
Q. What have you allowed at 98th and 99th Streets?
A. 98th and 99th Streets I have allowed nothing.
Q. Didn't you allow plottage there at 12 per cent.?
A. Yes, plottage at 12 per cent. but not for conjunction.

Mr. MATHEWSON: Plottage and conjunction he uses as two different terms.
The WITESS: Or call it connection with the water front, or connection with the bulkhead, that is what I generally call it.

Q. Did you examine these buildings when you were seeking to ascertain their values?

A. Yes—not the value of the gas plants, although I went through all the buildings in every gas plant in every block. I went and saw every building, but then I was ordered to value only those buildings that were occupied by tenants.

1345 Q. Did you ascertain the rentals received from those buildings occupied by tenants?

A. Yes, sir; I did.

Q. Now, taken as a whole, has this property improved in value within the last year?

A. Well, it has on general principles, like everything; it has increased all over the city as a whole, and certainly a portion of that increase has reverted to that property.

Q. Well, about what per cent. of increase would you place on this property within the past year?

A. Within the past year? Well, that is hard to say.

Q. Well, within the past two or three years?

A. Within the past two or three years it might be about 10 per cent.

Q. Not more than that?

A. Well, it would depend where the property is located. As you take property for instance on Lexington Avenue and 116th Street, Irving Place or on Third Avenue, it is a different computation than if you go away down on the East Side.

Q. Well, take 42d Street, the West Side?

A. At 42d Street I think that has appreciated at least 10 per cent. during the last three years, perhaps more.

Q. Take 98th and 99th Streets on the East Side. That is a thickly populated neighborhood, isn't it, between First and Second Avenue?

A. Yes, sir, it is.

Q. How much has that appreciated?

A. Well, certainly 10 per cent.; certainly, if not more.

Q. That is a growing neighborhood, isn't it?

A. Yes, sir.

Q. How much in your opinion will it increase in value in the next two years?

A. I could not tell.

Q. You are now undertaking to give the present day value of this property, are you?

A. I am, yes, sir.

1346 Q. And what you believe it would realize if sold to-day?

A. Yes, sir.

Q. And you have testified that without the gas plants on such property that the value would be enhanced or increased from 15 to 20 per cent.?

A. Yes, sir, if sold simultaneously, in one lump, you know, and the whole land cleared up.

Q. When you say simultaneously you do not mean to say if all this property were sold at once, do you?

A. Well, in the plants for instance, if you were to remove all the

gas plants from 14th Street up to 16th Street on one occasion, or all the plants on Avenue A from 19th to 20th Streets, it would be a different thing, and it would not necessitate the sale of the whole property together, all that property. I believe that auction prices would go from 10 to 15 per cent. higher if that whole thing was put up at auction.

Q. And has not that property increased over 30 per cent. in value since 1884?

A. Well, I cannot tell that; I have not computed that.

Q. You would not say it had not?

A. I would not say it has not and I would not say it has, for the reason that I have not investigated it.

Mr. BURR: That is all.

Redirect examination by Mr. MATHEWSON:

Q. In addition to your own dealings in real estate have you up to date kept track of sales of property, recorded sales and considerations all over the city?

A. Yes, sir.

Q. So that you have kept a record of transactions in which you had no part, as well as those in which you did have part, so far as possible?

A. Certainly.

Q. And in making your estimates which you have given here, did you take into consideration and make a study of actual transactions, whether by you or by others, so far as you could as-

1347 certain them?

A. Yes, sir.

Q. I understand that your estimate of values here is as the company is now in possession of the property?

A. Yes, sir.

Q. You say that in some cases you examined the city's maps?

A. Yes, sir.

Q. You did not find any material or substantial differences from the dimensions shown on Exhibit 48, did you?

A. Not in general; only on one, and that is 14th to 15th Streets and Tompkins Street.

Q. Was that a large difference?

A. It was a difference of about two feet.

Q. That is all?

A. That is all.

Q. Now, I understand that the value you have testified to here is what you call the value to-day?

A. Yes, sir.

Q. That is what the company might realize for the property if sold off in ordinary course?

A. Yes, sir.

Q. But you think that if these gas manufacturing plants were removed all at a time that that would increase the figures you have testified to by the percentage which you have named?

A. Yes, sir.

Mr. MATHEWSON: That is all.

Recess until 2 P. M.

1348 After Recess.

FREDERICK J. MAYER, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. What is your age?
A. Fifty-four.
Q. What is your business?
A. Mechanical engineer.
Q. For how long have you been a practicing mechanical engineer?
A. Thirty-four years.
Q. Are you a graduate of any technical institute?
A. Yes, the School of Technology, Stuttgart, Germany.
Q. What year?
A. 1872.
Q. Are you connected now with any firm?
A. I am not.
Q. Where is your place of business?
A. Baltimore.
Q. Were you ever connected with the firm of Bartlett, Hayward & Company?
A. Yes, I was their chief engineer for 23 years, and altogether with them for 33 years.
Q. Have you ever had anything to do with the construction of gas works and apparatus?
A. Yes.
Q. How much and how long?
A. During the last 25 years.
Q. Has gas work construction been a specialty of yours and this firm of Bartlett, Hayward & Company?
A. Yes, entirely.
Q. During that time with how many gas works have you had to do in the construction of, do you think?
A. I have designed and constructed in the neighborhood of 100 complete plants, fuel, coal and water gas plants.
Q. Where?
A. Throughout the entire country.
1349 Q. Any outside of this country?
A. Yes, partly in South America and Cuba.
Q. Have you ever designed and constructed any gas holders?
A. In the neighborhood of 400, yes, sir.
Q. Did you have anything to do with designing and constructing the heating and ventilating plants of the United States Government at Washington?

A. Yes, previous to taking up gas works construction I made plans for the heating and ventilating of all the large government buildings at Washington.

Q. With the exception of the Capitol?

A. No, sir, that was not in it, no, sir.

Q. In addition to this gas works construction, which you have testified is a specialty, have you ever been engaged in structural work for buildings other than gas plants?

A. No, sir.

Q. Have you examined and appraised the manufacturing plants of the Consolidated Gas Company on the Island of Manhattan?

A. I have.

Q. What time was consumed in such appraisal and examination?

A. I have been working with 12 people altogether for the last six weeks, day and night and Sundays included; very often as late as midnight. I should judge that would be equivalent, ordinary working time, in the neighborhood of three months.

Q. Have you personally examined these plants?

A. I have.

Q. And the apparatus in them?

A. Yes.

Q. Every piece of it, which you have valued?

A. Yes.

Q. Have you examined the buildings?

A. I have.

Q. How about the holders which you have valued?

A. I also examined the holders, yes, sir.

Q. Are you able to state the value of the plants as they exist to-day?

A. I am, sir, yes.

1350 Q. The values which you are about to give mean the cost of reconstruction of the plant new to-day, or is depreciation taken out or deducted, where you have observed any depreciation?

A. My figures are based on prices of to-day, allowing for depreciation dependent upon the condition of each apparatus, building or holder.

Q. So that your figures have taken into account depreciation and deducted it?

A. They have in each instance.

Q. If these plants were to be reconstructed new with the same capacity and of the same character, would such cost of construction therefore be greater than the figure at which you have appraised them?

A. Yes, sir.

Q. I will ask you to take first the 14th Street plant of the company, located between 14th and 16th Streets on or near the East River. What sort of plant is that?

A. A coal gas plant, five million cubic feet capacity a day.

Q. And generally speaking, what area does it cover, how many blocks?

A. I would have to refer to the plans, I did not put the streets down; I have not got the plans here.

Q. Did you personally go over this?

A. I did, repeatedly.

Q. What is the value of the buildings there?

A. For the 14th Street plant——

Mr. PAGE: I object to the giving of this testimony in a general way. Find out what buildings there are.

Mr. MATHEWSON: That has already been testified to, what the buildings are.

Mr. PAGE: No, it has not been testified to at all; not a line of testimony about it.

The MASTER: Why not ask him to describe the plant generally?

1351 Q. Well, describe the plant and buildings. You have stated what the character of the plant is.

A. There is an office building—do you want the dimensions of it?

Q. Yes.

A. (Continuing:) 42 feet by 32 feet 6 inches by 23 feet 9 inches high, to the underside of the roof frontage.

Q. Go on with the other building.

A. A pay room attached to this building, a two-story brick building 28 feet 1 inch by 13 feet 1 inch by 23 feet high.

Building over alley, one-story, 11 feet wide 28 feet 1 inch by 10 feet 10 inches.

Store room, two-story building, 21 feet 9 inches by 28 feet 1 inch by 23 feet high.

Boiler room, one-story building, 28 feet by 44 feet by 24 feet high.

Engine room, two-story building and attic, 44 feet by 13 feet 10 inches by 24 feet high.

Exhauster house, two-story building, 28 feet 1 inch by 20 feet 6 inches by 23 feet high.

Machine shop and store, 47 feet by 28 feet by 23 feet.

Smith shop, 35 feet by 52 feet 2 inches by 23 feet high.

Condenser house, one-story building, 54 feet 1 inch by 36 feet 6 inches by 27 feet high.

Shed, one-story building, with galvanized iron sidings 38 feet 3 inches by 31 feet by 11 feet 6 inches high.

Large purifier house, 67 feet by 127 feet by 24 feet high.

Small purifier house, 40 feet 5 inches by 67 feet by 16 feet 6 inches high.

Oxide house, 37 feet 10 inches by 67 feet by 16 feet 6 inches high.

Meter house, 33 feet 7 inches by 40 feet 4 inches by 24 feet high.

1352 Center seal house, 16 feet by 16 feet 2 inches by 14 feet 9 inches high.

Another house of same description and dimensions and for the same purpose.

Boiler house, one-story brick building, 15 feet 2 inches by 38 feet 10 inches by 16 feet 6 inches.

Valve house, one-story and basement brick building, 12 feet 3 inches by 21 feet 4 inches by 12 feet 6 inches.

Now, before I have any other buildings I have the brick walls, to the boiler yard. Do you want those, or shall I continue with the buildings.

Q. Just continue with the buildings?

A. Retort house, one-story brick building, 185 feet 9 inches by 245 feet 4 inches by 22 feet 9 inches.

Scrubber house, one-story brick building, 48 feet 3 inches by 12 feet by 16 feet 5 inches.

Then there are some more walls around the property, brick walls.

Q. Are those included in the value of the buildings?

A. They are on the building schedule.

Q. Just mention them as they go along then, I did not understand it?

A. There is a brick wall around the holder yard; north wall 351 feet 2 inches long, south wall 366 feet 6 inches, west wall 207 feet.

By Mr. Page:

Q. How high and how thick are the walls?

A. They average 12 inches, with 20-inch pilasters, 3-inch stone coping and 3-inch water tables. The average height is about 12 feet above grade line.

Walls between Avenue C and D, 23 feet 7 inches on 14th Street and 245 feet 4 inches on 14th Street. That forms part of the retort house wall; that is a continuation of it. Two walls, one on 14th Street, and one on 15th Street, each 131 feet 6 inches long. All of those walls are 12 inches with pilasters, with water tables and stone copings.

1353 Shed 75 feet 6 inches by 21 feet 6 inches by 17 feet, covered with corrugated iron on wooden framing.

Another shed, same description and dimensions.

Coke storage, 131 feet 6 inches by 63 feet 8 inches. The two end walls are formed by the walls of the retort house and coal shed. The two long walls are formed by brick piers, 28 inches square, with arches between the piers.

Gas engine house, one story brick building, 13 feet 3 inches by 41 feet 6 inches by 11 feet 3 inches.

Coal hopper, 21 feet 6 inches by 63 feet by 32 feet 7 inches, one-story.

Coal shed, one story brick building, 184 feet 5 inches by 206 feet 6 inches by 26 feet 6 inches.

Rigging house at end of coal shed, two story building, 22 feet long by 13 feet 6 inches by 20 feet high.

Small office building 10 feet by 10 feet by 10 feet high.

A. Coal and coke storage. There are four lots, with cover the length of 282 feet 8 inches on the northside, 371 feet 11 inches on the south side, 226 feet 6 inches on the east side and 206 feet 6 inches on the west side. These lots are surrounded by timber fences and timber trestle work, arranged for coal handling machinery.

Another boiler and engine house combined, one-story brick building, 11 feet by 25 feet by 20 feet.

Another boiler house 16 feet by 28 feet 1 inch by 11 feet.

A circular brick building, 11 feet diameter, 54 feet high.

Another boiler house. One-story frame building 32 feet 5 inches by 16 feet by 11 feet 6 inches.

Valve house, one-story frame building 12 feet 4 inches by 10 feet 4 inches by 9 feet 6 inches.

1354 Exhaust house. One-story brick and basement building, 50 feet 8 inches by 43 feet 4 inches by 20 feet 3 inches.

Boiler house. One-story brick building, 27 feet 8 inches by 32 feet by 20 feet 2 inches.

Foundations for tar and ammonia tanks.

Coke office, one-story brick building, 9 feet 5 inches by 15 feet 5½ inches by 13 feet 10 inches.

Boiler house. One-story brick building, 18 feet 5 inches by 19 feet 2½ inches by 17 feet one-half inch, or an average of 16 feet high.

Clay mill. One-story frame building, 17 feet ½ inch by 29 feet 6 inches by 12 feet 3½ inches.

Clay storage. Similar building, 20 feet 3 inches by 19 feet ½ inch by 14 feet 9 inches.

Storage shed. One open frame shed, 33 feet 5½ inches by 40 feet by 9 feet 10 inches.

Another shed of similar description. 36 feet 1 inch by 19 feet 4 inches by 8 feet 11 inches high.

Stable. Two-story brick building, 50 feet by 32 feet 1 inch by 26 feet 11½ inches.

Storage shed. One-story open-frame building, 19 feet 6 inches by 84 feet 11 inches by 11 feet 4½ inches.

Carriage room, called Shed No. 1. One-story frame building, 19 feet 10 inches by 19 feet 10 inches by 10 feet 4½ inches.

Pump house. One-story frame building, 11 feet by 13 feet 2 inches by 8 feet 6 inches.

Another storage shed. One-story brick building, 20 feet 9 inches by 46 feet 8 inches by 12 feet 10 inches.

Another storage building. One-story brick, 21 feet by 36 feet 4 inches by 12 feet 10 inches high.

Another storage shed, 25 feet 10 inches by 31 feet 2 inches by 10 feet high.

Q. Brick also?

A. No, corrugated iron on the east and north sides; the fence forms the south and west sides.

1355 Fences: One iron fence, 381 feet 3 inches, 5 feet high; 251 feet iron fence, 4 feet 6 inches high; 715 feet iron fence, 3 feet high; 296 feet 6 inches, timber fence, 12 feet 6 inches high; 1,170 feet wooden fence, 9 feet 6 inches high; 605 feet of plank fence, of 3-inch plank, 13 feet high; 480 feet of wooden fence, 1-inch boards, 8 feet high.

Paving in holder yard: 11,140 square feet of brick, laid flat.

Another boiler house. One-story brick building, 18 feet 4 inches by 20 feet by 20 feet 9 inches long.

Weigh office. One-story and basement brick building, 16 feet 5 inches by 26 feet 6 inches by 13 feet 2 inches.

Another storage building. One-story brick building, 8 feet by 7 feet 11 inches by 7 feet.

Another valve house, 10 feet by 7 feet by 12 feet.

Another boiler house, 14 feet by 20 feet by 13 feet.

Now, pile foundation on the north side of 15th Street, for a similar foundation as coal handling trestle on opposite side of the street.

A portion of a newly erected boiler house, now in course of construction.

Foundations for tower scrubbers.

Concrete: 34 feet wide, 64 feet long, 4 feet deep. That is all for the buildings.

By Mr. MATHEWSON:

Q. Have you carefully estimated the value of the buildings and structures which you have just enumerated and making deduction for deterioration or depreciation wherever you found it to occur?

A. I have.

Q. Will you state the value of those structures?

A. $691,961.

Q. Will you now describe generally the apparatus at the 14th Street plant which you have examined and valued?

1356 A. The entire apparatus consists of all the machinery required to produce 5,000,000 feet of coal gas in 24 hours, consisting of the ordinary apparatus, including benches, purifiers, exhausters, the boilers, scrubbers, condensers, meters, pipe connections and so forth that make a complete plant.

Q. All contained in the structures which you have just valued?

A. Yes, sir.

Q. What is the value of such apparatus, making similar deduction for depreciation where you found it to occur.

Mr. PAGE: I object to the question as calling for a conclusion, without any detail, not based upon anything in the case.

The MASTER: I will allow it.

Mr. PAGE: Exception.

A. In detail?

Q. Well, I think I will let you give it. Yes, you may proceed and state the apparatus which you are about to value?

A. Now, together with the apparatus I have included all the contents of all the other buildings before mentioned, such as office buildings.

Q. Yes.

A. There is —— office building; contents:

One bookkeeper's desk.

One iron safe.

One roll-top desk.

One chair.

One flat-top desk and chair.

One lavatory and toilet.

One washstand.

Three Black walnut closets.

The MASTER: Excuse me a minute. Wouldn't it be possible to have these schedules or copies of them submitted as part of the witness' testimony, asking him the general questions about the
1357 value and then put those in evidence. In other words, is it necessary to sit here and by question and answer have all these items of office desks and waste baskets spread out on this record?

Mr. PAGE: No objection if we can have an opportunity to examine the exhibits so as to make a proper cross-examination. They probably could not be printed inside of some weeks.

The MASTER: That is merely a suggestion. That would be my way of doing it. But go on, if counsel insists on having it this way. Proceed.

Mr. PAGE: We do not insist.

The MASTER: I understood you did, Senator. I understood you objected to a general description and you wanted him to state the particulars.

Mr. PAGE: I just stated I would be perfectly willing if they would submit this schedule, or if they would give us a copy so that we would have an opportunity to examine properly. If offered in evidence in this form it probably wouldn't be printed for several weeks yet.

Mr. MATHEWSON: If you wish, I can give you a copy of the description of this apparatus which the witness is referring to now as the witness would read it, and a description of that which he values. There are pages of it.

Mr. KIRBY: If counsel would have a statement prepared giving an inventory of the plants and the value the witness puts upon them that will do.

Mr. MATHEWSON: You have the value in the testimony, Mr. Kirby.

The MASTER: You may go on, Mr. Mayer.

The WITNESS (continuing): One bookkeeper's desk, two
1358 roll top desks, one safe, one flat top desk, and typewriter, one washstand, one 5 foot meter purifier, one drawing case filled with drawings, one toilet, one sink, chemical apparatus and books.

In the storeroom; contents: small oil tanks and work bench and some junk.

In one of the boiler houses: One Roland, 60 inches by 16 inches, 80 horsepower boiler.

One Clark's steam and fire regulator.

One cast iron tank, 32 feet by 48 feet by 4 feet 6 inches deep over the boiler house.

Mr. MATHEWSON: In view of the time consumed in reciting these details we will prepare and deliver the description of the apparatus and contents for the total value of which I have just asked the witness, in lieu of the witness reading the items, if that is acceptable, Senator?

Mr. PAGE: Yes.

Q. Now will you state the total value of the apparatus and contents of the buildings to which you have referred and which apparatus and the contents you began to enumerate?

A. $578,940.

Q. Does that allow fo. depreciation wherever you found it to occur?

A. Yes, sir.

Q. Have you appraised what are known as the connections or yard connections of the 14th Street plant?

A. Yes, sir.

Q. That is not long, is it?

A. No, it is very short.

Q. Just state what they are and their value in toto?

A. There is cast iron pipe from 2 inches to 30 inches in diameter, 1079.58 tons, 22,523 feet.

Wrought iron connections, 1 inch to 4 inches in diameter, 7,425 feet.

Valves:

Six 1 inch.

1359 Twelve 1-½ inch.

Seven ¾ inch.

Ten 1-¼ inch.

Four 2 inch.

Twenty-two 4 inch.

Five 6 inch.

Three 10 inch.

Seventeen 12 inch.

Four 16 inch.

Fourteen 24 inch, three way valves.

Forty-eight 20 inch.

Sixty-seven 30 inch.

Q. What is the total value of those yard connections?

A. $146,895.

Q. Will you now enumerate the holders connected with the 14th Stre-t plant?

A. Six gas holders of 345,500 cubic feet capacity each; two gas holders 250,000 cubic feet capacity each. The six holders are all provided with brick tanks constructed upon pile foundations.

Mr. PAGE: What about the other two?

The WITNESS: I only gave you six.

Mr. PAGE: You gave us eight.

The WITNESS: It should be eight. The holders are all alike, six and two. There are 8 holders and 8 tanks.

Q. Is that all?

A. That is all for the holders.

Q. What is the total value of those holders, considering their condition to-day?

A. $475,356.

Now, holders in steel tanks, one holder, 3,250,000 cubic feet capacity. This holder has a concrete foundation constructed upon piles and surrounded by a retaining wall. The total value?

Q. The total for holders?

A. Holders in steel tanks, $314,248.

1360 Q. What is the total of holders both with and without steel tanks?

Mr. PAGE: There is just one steel tank holder, is that it?

The WITNESS: Yes, one steel tank holder. You want the total of all the holders?

Q. Yes.

A. The total of all holders is $789,604.

Q. In these holders I assume you have included the pile foundations and the retaining walls, etc., where they exist?

A. Yes, sir.

Q. And the tanks?

A. Yes, sir.

Q. Will you now state the total value of the 14th Street plant, including buildings, apparatus and contents, yard connections and holders to which you have testified?

A. To those prices which I have given must be added an item of 10 per cent. for general engineering and drawings and gradings, pavings, curbing, sewerage, drainage, temporary fences operating tools and other utensils used for operating of plant. Water for holder tanks and other items which I overlooked in my examination.

Q. How much is this additional 10 per cent.?

A. For the buildings it is $141,779. For the holders it is $78,960. And then there is an interest charge of 5 per cent., amounting to $77,978 in the instance of the buildings, and $43,428 in the instance of the holders. What I mean by buildings, that includes buildings, apparatus and pipe connections, that first total item.

Q. Did you say $140,000 on buildings?

Mr. PAGE: He says he meant buildings, apparatus and pipe connections.

The WITNESS: Yes, everything except the holders.

Q. And connections?

A. Yes, sir, everything except the holders. That makes a
1361 total for everything except the holders of $1,637,553, and everything for all holders $911,992; a total for the entire plant of $2,549,545.

Q. Is that what you consider the value to-day, having allowed for depreciation wherever you found it to occur?

A. You must excuse me one moment. I make the total value here $2,549,545, but there seems to be a discrepancy between my summary figure and my figure on the detailed sheet. I would like to look that over and see if there is any difference in it. The value is $2,549,545.

Q. To-day, allowing depreciation?

A. Yes, sir.

Q. Now, upon what do you base this 10 per cent. allowance for engineering and other items to which you have referred?

A. That is the general engineering and making of plans for the entire plant.

Q. Based upon your experience and study?

A. Yes, sir.

Q. Do you consider that a fair figure?

A. I consider it a low figure. In order to establish this figure I went especially to Baltimore a week ago for twenty-four hours in

order to look over my records and I found that this item averages nearer 15 per cent. than 10 per cent.

Q. You took the 10 per cent. so as to be conservative?

A. I made the 10 per cent. so as I would be sure not to value it too high.

Q. Now, the 5 per cent. interest is based, is it not, upon the assumption of the time it would require to build a plant of this kind?

A. Yes. It will take on an average two years to build a plant of this kind, any one of these plants.

Q. So assuming the construction to progress favorably, that would make a year's interest on the whole sum?

A. Yes. Of course, in the beginning you have very little expenses, and they gradually accumulate as you proceed with
1362 the construction, so I have assumed an average of one year on the total amount.

Q. Now, Mr. Mayer, will you take what is known as the 42d Street Plant, located at 42d and 43d Streets and the North River. State whether you have examined the buildings, apparatus and yard connections and holders forming part of or connected with that plant?

A. Yes, sir.

Q. Will you describe the buildings briefly as you did before in reference to the 14th Street plant?

A. Yes.

One valve house, octagonal brick building, 21 feet 10 inches by 12 feet high. That is, 21 feet 10 inches between the parallel sides.

One meter house, one-story brick building, 10 feet 8 inches by 22 feet 3 inches and 9 feet 6 inches high.

Purifier house; one-story frame building, 160 feet by 76 feet by 20 feet.

Engine and meter house, two-story brick building, 14 feet 6 inches by 59 feet 6 inches by 28 feet.

One toilet building, one-story brick, 5 feet 6 inches by 5 feet 6 inches by 8 feet 6 inches.

One retort house, 261 feet 2 inches by 62 feet 2 inches by 27 feet high.

Condenser and scrubber house, two-story brick building, 23 feet 3 inches by 60 feet 2 inches by 42 feet high.

Retort house- No. 2 and 3, 100 feet 4 inches by 118 feet 3 inches by 24 feet high.

Exhauster and engine house, one-story brick building, 28 feet 6 inches by 100 feet 4 inches by 24 feet high.

Retort house No. 4, one-story brick building, 34 feet 4 inches by 38 feet by 24 feet high.

South and north walls of Nos. 1, 2 and 3 retort houses.

Wall between purifier and exhauster houses.

One shed, 12 feet by 140 feet by 12 feet high.

1363 No. 1 coal shed, one-story brick building, 171 feet by 90 feet by 21 feet 9 inches high.

Runways in coal sheds. Two runways 9 feet wide, 170 feet long.

No. 2 coal shed, two-story brick building, 89 feet 9 inches by 171 feet by 29 feet high.

Carpenter shop. Small room partitioned off in second story of No. 2 coal shed.

Brick fence on Eleventh Avenue, 195 feet 10 inches, 9 feet above grade, 16 inches thick.

One wrought iron picket fence, same length as brick wall.

Brick fence on 42d Street, 235 feet 3½ inches long.

Stable and wagon shed, 98 feet 9 inches by 67 feet 10½ inches by 18 feet high.

Eastern extension of above building, 32 feet 10½ inches by 30 feet 4 inches by 10 feet high.

Additional extension, 32 feet 10½ inches by 26 feet 6 inches by 14 feet high.

Storage building, one-story brick, 34 feet by 24 feet 6 inches by 20 feet.

Harness house, 16 feet 6 inches by 16 feet 6 inches by 18 feet high.

Coke storage office, 15 feet, 4 inches by 7 feet 4 inches by 13 feet 6 inches.

Iron bridge crossing Twelfth Avenue. Span, 100 feet by 12 feet wide.

Frame building for deodorizing purposes 26 feet by 20 feet 4 inches by 12 feet high.

One timber pump house, 20 feet by 10 feet by 10 feet.

One timber ash dump.

Timber retaining fence for coke storage 700 feet. That is all.

Q. What is the capacity of this plant, Mr. Mayer?

A. 4,500,000 cubic feet of coal gas.

Q. Per day?

A. Per day, yes, sir.

1364 Q. What is the value of the buildings and structures which you have just enumerated at that plant, allowing for depreciation wherever you observed it?

A. For the buildings alone?

Q. Yes.

A. $598,848.

Q. Did you also examine and value the apparatus and contents of the buildings?

A. Yes.

Q. Of the 42nd Street plant?

A. Yes.

Mr. MATHEWSON: I will furnish counsel a similar description to that which we propose for 14th Street.

Q. Without taking time to enumerate them on the record will you state what the value is of the apparatus and contents at 42nd Street, depreciation deducted where you found it?

A. For the apparatus $551,743.

Q. Will you now describe the yard connections or general connections of the plant if you valued them separately?

A. Cast iron pipes and connections from three to thirty inches in

diameter, 18,129 feet; steel riveted pipes from 20 to 24 inches in diameter 540 feet; wrought iron pipe connections, three inches and less, 2,800 feet; valves, three 30 inches, thirty-four 24 inches, eleven 20 inches, fifteen 16 inches, twenty-five 12 inches, three 10 inches, and ten 8 inches.

Q. What is the total value of those connections?

A. $134,157.

Q. And you also examined and valued the holders connected with the 42nd Street plant?

A. Yes.

Q. Please describe them and give their values.

A. There are four holders of 250,000 feet capacity each, with brick tanks constructed on pile foundations. The total cost of those holders—do you want the cost?

Q. Yes, go ahead.

A. $225,778.

1365 Q. You mean value, the same as you have been testifying, $225,778?

A. Yes.

Q. Are those items exclusive of the 10 per cent. engineering and the five per cent. interest?

A. Yes.

Q. Will you now state what additions you make to the figures you have given to get the entire value of the plant.

A. The entire cost of all the buildings, apparatus and connections, with ten per cent. for contingencies and five per cent. for interest amounts to $1,483,888.

Q. How much does the ten per cent. additional for engineering amount to? And how much the five per cent. for interest?

A. On the items above referred to $128,474 for contingent fees and $70,666 for interest.

Q. This value of $1,483,888, do I understand is the value to-day, allowing depreciation and deducting it where you find it to occur?

A. Yes, sir.

Q. Are there any additions which should be added, or any other items additional at 42nd Street?

A. Yes, the same ten per cent, for contingencies and five per cent. for interest on the value of the holders, which amounts to $22,577 for contingencies, and $12,417 for interest, making a total value for the holders, of $260,772, and the value of the entire plant, $1,744,660.

Q. The $1,483,888 did not include then the holders?

A. It did not.

Q. Nor the 10 per cent. and the 5 per cent. computed on them?

A. Not on the holders, no, sir.

Q. So that the total valuation is how much now to-day, deducting depreciations?

A. $1,744,660.

Q. The 42nd Street plant is a coal gas plant?

A. Yes, sir.

Q. We will now take the 44th Street plant; have you also exam-

ined and appraised the apparatus and contents, connections and holders there located?

A. Yes.

1366 Q. What kind of gas is manufactured at 44th Street?

A. Water gas.

Q. What is the capacity of the works?

A. 8,500,000 cubic feet per day.

Q. Will you now describe the buildings there in the same manner as you have for the other plants, briefly?

A.—

Governor house, octagonal building, 11 feet 2½ inches between parallel sides, 16 feet high.

Valve house, octagonal brick building, 9 feet 7 inches between parallel sides, 18 feet 6 inches high.

Carpenter shop, two-story brick building, 26 feet by 35 feet 6 inches by 30 feet.

Lumber shop, 25 feet by 28 feet by 22 feet.

Purifier house, one-story brick building, 155 feet 9 inches by 65 feet 8 inches by 30 feet.

Oxide room, included in purifier house.

Meter house, two-story brick building, 43 feet 9 inches by 45 feet 1 inch by 37 feet 6 inches.

Condenser house, 44 feet 10 inches by 49 feet 8 inches by 32 feet 10 inches high.

Engine house, two-story brick, 49 feet by 44 feet 10 inches by 47 feet 1 inch.

Generator house, two-story brick, 139 feet 9 inches by 65 feet 10 inches by 27 feet.

Retort house, one-story brick, 207 feet by 65 feet by 21 feet.

Coal hoist, wooden frame structure, a small wooden frame building.

Concrete mixer shop, frame building, 25 feet by 16 feet by 9 feet.

Storage, tar tank building, 12 feet by 12 feet by 12 feet, wood frame, corrugated iron sides.

Oil pump house, two-story brick, 28 feet 9 inches by 18 feet 9 inches by 27 feet 3 inches.

Tar separators, foundations for tar separating system on 12 inch piles, brick walls and concrete footing.

1367 Coal shed, frame structure, 118 feet 9 inches by 69 feet 9 inches by 32 feet high.

Scale building, one-story brick, 6 feet by 6 feet by 9 feet.

Water tower, two-story circular brick building, 20 feet in diameter by 35 feet high.

Exhauster house, two-story brick building, 25 feet by 27 feet by 20 feet.

Lime shed, 104 feet by 75 feet by 14 feet.

Purifier and meter house, brick building, 132 feet 3 inches by 65 feet by 25 feet 6 inches; roof construction, iron trusses, iron purlines, slate covering.

Stable, 60 feet by 45 feet by 20 feet, brick building.

Tool shed, one-story brick, 37 feet 7 inches by 26 feet by 16 feet.

Storehouse, brick building, 24 feet by 24 feet 3 inches by 16 feet 3 inches.

Small brick building, 10 feet by 10 feet by 20 feet.

One frame shed covered with corrugated iron, 10 feet by 8 feet by 8 feet.

Blacksmith shop, frame building, 15 feet by 35 feet by 16 feet.

Pipe house, storage shed for wrought iron pipe.

Pump house, frame building, 8 feet by 6 feet by 7 feet. Tin roof.

By Mr. KIRBY:

Q. Most of the largest buildings have iron roofs, have they not?

A. Partly iron, partly wood; the generator houses and purifier houses have iron trusses, some of them; some of the purifier houses are wooden and some iron.

Brick walls, 1,179 feet of stone and brick walls, 1,100 feet of brick fence.

Shed over oil tanks; frame shed, 54 feet by 6 feet 4 inches by 5 feet 6 inches.

Foundations for salt water condenser.

Foundation for hot scrubber.

1368 Foundations for air condenser.

Brick drainage tank underground in yard between scrubber and retort houses.

Draught fan room, frame building, 12 feet by 8 feet by 8 feet.

That is all for the buildings.

Q. Will you state the total valuation of the buildings?

A. Without anything added?

Q. Yes.

A. $407,767.

Q. That deducts depreciation where you found it?

A. Yes, sir.

Q. Have you also examined and valued the apparatus and contents of the buildings?

A. I have.

Mr. MATHEWSON: We will also furnish a description of the apparatus and contents to counsel, as in the case of the other plant.

Q. Will you state what the value of the apparatus and contents is, allowing depreciation where it was found?

A. $409,175.

Q. Will you describe the yard connections and general connections which you have valued at that plant?

A. Cast-iron pipe, 4-inch to 36-inch diameter, 9,117 feet;

Steel-riveted pipe, 16 inches to 30 inches in diameter, 600 feet.

Wrought-iron pipe, 1½-inch to 12-inch diameter, 8,702 feet.

Valves:

Sixty-eight 1½-inch.

Thirty-seven 2-inch.

Thirty-six 2½-inch.

Forty-five 3-inch.

Fifty-eight 4-inch.
Ten 5-inch.
Thirty-four 6-inch.
Seven 7-inch.
1369 Eighteen 8-inch.
Four 12-inch.
Nine 16-inch.
Twelve 20-inch.
Seventy-seven 24-inch.
One 30-inch.
That is all for the connections.

Q. What is the total value of the connections?

A. $99,910.

Q. Will you now describe the holders which you valued in connection with the 44th Street plant?

A. There are four holders, 375,000 cubic feet capacity each; one holder of 2,000,000 cubic feet capacity, and two holders of 125,000 cubic feet capacity each. All of the above holders are supplied with brick tanks constructed in rock excavation.

Q. What is the value of the holders?

A. $814,929.

Q. Do these figures which you have given for building apparatus, connections and holders include the 10 per cent. for engineer and the interest in course of construction?

A. No, sir, they do not.

Q. Now, will you state what items should be added to get the total value of the plant as existing?

A. To the building apparatus and pipe connections 10 per cent., on contingencies, amounting to $91,685, and interest at 5 per cent., $50,426. To the holders, for contingencies, $81,492, and for interest charges, $44,821.

Q. Why do you say 10 per cent. for "contingencies"?

A. That goes on the total plant, holders and buildings and apparatus and pipe connections altogether for the items mentioned, engineer, drainage, storage.

Q. When you say "contingencies" you mean the engineer expenses, sewers and so forth, which you previously described?

A. Yes, I do.

Q. Adding these items then, what is the total valuation of
1370 the plant to-day, building, apparatus, connections, and holders, after deducting such depreciation as you found?

A. $2,000,205.

Q. We will now take up the 21st Street plant, located between 20th and 22nd Streets, contiguous to or near the East River. Have you examined and appraised that plant as to the buildings, apparatus, connections and holders?

A. I have, sir.

Q. What gas is produced there?

A. Water and oil gas.

Q. What is the capacity of the plant?

A. Twenty-four million cubic feet of water gas per day and three and one half million cubic feet of oil gas per day.

Mr. KIRBY: Did you state the capacity of the 44th Street plant?

The WITNESS: It is 8,500,000 feet per day of water gas.

Q. Now proceed, please, to describe the buildings at the 21st Street plant which you have appraised and valued.

A. Stove shop, one-story building, 212 feet 6 inches by 50 feet by 20 feet.

Meter shop, one-story brick building, 212 feet 6 inches by 50 feet by 20 feet.

Stove repair shop, part one-story and part two-story buildings; one-story part, 64 feet by 51 feet by 20 feet; two-story part, 20 feet 6 inches by 51 feet by 35 feet.

Stove cleaning room, 51 feet by 14 feet by 20 feet.

Diaphragm room, second story over repair shop.

Prepayment meter repair shop.

Frame shed, 98 feet by 61 feet by 15 feet.

Storage room, 20 feet by 51 feet.

Wash room, 12 feet by 51 feet.

1371 Boiler house. Brick building, 40 feet by 58 feet by 20 feet.

Oil storage house, 12 feet by 14 feet by 7 feet.

Lead house, 22 feet by 17 feet by 10 feet.

Steel frames covered with corrugated iron.

Fire hose house, 5 feet by 5 feet by 6 feet.

Frame building covered with sheathing and tin.

Valve house, 21 feet 9 inches by 28 feet by 11 feet; brick building.

Octagonal valve house, brick building, 10 feet 3 inches between parallel sides; 25 feet high.

Another valve house, brick building, 15 feet 6 inches by 10 feet by 12 feet.

Tinsmith's shop, 26 feet by 28 feet by 25 feet.

Storeroom, triangular in shape, a brick building.

Paint shop, duplicate of storeroom.

Office, 47 feet 4 inches by 51 feet by 26 feet 6 inches high.

Engine room, 150 feet by 74 feet and 46 feet by 44 feet, both 25 feet high.

Engine room, 130 feet by 52 feet by 25 feet high.

Machine shop, 26 feet by 52 feet.

Old retort house, 306 feet by 54 feet by 23 feet.

New shop building, 47 feet by 57 feet by 15 feet.

Old carbureter house, 38 feet square.

Generator house, 204 feet by 50 feet by 30 feet.

Building over boiler and coke storage, 307 feet 3 inches by 68 feet by 25 feet high.

Generator house, 204 feet by 74 feet by 30 feet.

Retort house, 307 feet 3 inches by 74 feet by 25 feet.

Pump house, two-story brick, 20 feet by 38 feet by 29 feet 4 inches.

No. 1 shed, 185 feet 6 inches by 66 feet by 28 feet 6 inches.

Numbers 2, 3, 4 and 5 sheds, same as No. 1 shed.

Purifier house, 185 feet 6 inches by 66 feet by 44 feet high.
1372 Condenser house, 185 feet 6 inches by 66 feet by 44 feet high.
Purifier house, 185 feet 6 inches by 66 feet by 44 feet high.
Meter house, one-story brick, 92 feet by 72 feet by 28 feet high.
Shaving scrubber house, 185 feet 6 inches by 66 feet by 35 feet high.
Exhauster house, two-story brick, 64 feet 4 inches by 49 feet 10 inches by 41 feet 3½ inches high.
Coal shed, 150 feet by 68 feet by 34 feet high.
Water tower, circular brick building, 20 feet diameter, 225 feet high.
Excavation and foundations for 12 oil tanks underground.
Excavation for 10 separating tanks located underground.
One new foundation for additional oil tank 57 feet in diameter by 30 feet high.
One foundation for steel tank, 16 feet by 50 feet by 2 feet 4 inches deep. That is all.

Q. What is the total valuation of the buildings described, depreciation deducted where you found it?
A. $1,579,695.
Q. Did you give the capacity of this plant?
A. I did.
Q. Have you also examined and appraised the apparatus and contents there?
A. I have.

Mr. MATHEWSON: We will furnish counsel a description of those.

Q. Without asking you to repeat those in detail on the record, what is the total value of the apparatus and contents, depreciation deducted?
A. $1,139,677.

Q. Will you now describe the yard connections?
1373 A. It is not yard connections, it is the whole connections throughout the entire plant.
Q. I will change my question to the connections throughout the plant.
Mr. KIRBY: I presume that applies in all instances where you have used the term yard connections, you mean yard connections and internal connections?
The WITNESS: Yes, all connections to the appliances in the plant.
Q. You may proceed to describe the connections at 21st Street.
A. —.
Cast iron pipe 8-inch to 36-inch diameter, 6,624 feet.
Steel riveted pipe, 16-inch to 36-inch in diameter, 4,772 feet.
Wrought iron pipes, 1½-inch to 12-inch in diameter, 1,550 feet.

Valves:

Sixteen 12-inch.
Five 16-inch.
One 18-inch.

Eighteen 20-inch.
Forty-eight 24-inch.
One hundred and thirteen 30-inch.
Twenty-seven 36-inch.
Twelve 36 regulator valves.
That is all for that.

Q. What is your valuation for that item?

A. $218,201.

Q. Will you describe the holders which you valued at or in connection with this 21st Street plant?

A. There are four holders, 400,000 cubic feet capacity. One holder 1,500,000 cubic feet capacity. Those five holders are in brick tanks.

1374 Q. Is that all?

A. Yes, sir. Those are all brick holder tanks.

Q. Just go on with the other holders?

A. Do you want them altogether? We separate them in the office.

Q. All right, what is the value of the holders which you have named?

A. $561,840.

Q. Now, go on with the steel holders?

A. One holder 149,500 cubic feet capacity, and one holder 280,000 cubic feet capacity; they are steel tanks constructed upon concrete foundations on piles.

Q. What is the value of those holders?

A. $104,070.

Q. And the total for all the holders?

A. $665,910.

Q. What other items enter into the total value of the plant?

A. Ten per cent. to the buildings, apparatus and pipe connections, amounting to $292,293, and interest charges of 5 per cent., amounting to $293,757, making a total for plant without holders of $3,392,895. To the value of holders must be added a charge of 10 per cent., amounting to $66,591, and an interest charge of 5 per cent., amounting to $36,625, making the total value of all holders, $769,126.

Q. And the total value of the plant to-day, allowing depreciation, is how much?

A. $4,162,021.

Q. What is the next plant conveniently in order? Is it the 99th Street plant?

A. Yes.

Q. Have you examined and appraised the buildings, apparatus, connections and holders at the 99th Street plant or connected with it?

A. I have.

Q. What is the capacity of the 99th Street plant?

A. 5,500,000 cubic feet in twenty-four hours.

Q. Of what kind of gas?

A. That is water gas.

Q. Will you describe the buildings at that plant as you have done in the case of the other plants?

A. Engine and boiler house and pump house, machine
1375 shop, retort house and accumulator house, five houses under one roof; 271 feet 3 inches by 57 feet 5 inches by 28 feet brick building.

Generator house, two-story brick building, 69 feet by 67 feet 4 inches by 24 feet 6 inches.

Foundations for one air condenser.

Foundations for salt water condenser.

Office building, two-story brick, 42 feet by 30 feet 8 inches by 30 feet 6 inches.

Meter house, one-story brick, 52 feet by 39 feet by 27 feet.

Purifier house, one-story brick, 124 feet by 61 feet 6 inches by 30 feet.

Lime house, one-story brick, 75 feet by 15 feet 9 inches by 18 feet.

Valve house, frame shed, 10 feet by 12 feet by 10 feet.

Valve house, octagonal frame building, 8 feet between parallel sides.

Three additional valve houses, of same dimensions and description as above.

Condenser house, one-story brick, 52 feet by 39 feet by 27 feet.

Exhauster house, one-story brick building, 42 feet 8 inches by 27 feet by 25 feet.

Tar separator system.

Foundations for same.

Foundation for tar storage.

Pump pit, 23 feet by 13 feet 8 inches by 10 feet deep, of concrete.

Coal shed, one-story brick, 125 feet by 46 feet by 18 feet.

Filter press house, one-story frame, 13 feet by 20 feet by 7 seven.

Brick walls, 663 feet of wall, average height 10 feet 12 inches thick.

Timber fences, dressed lumber, 9 feet high.

I have not got the number of feet for that.

Cover over domes of oil tanks.

1376 Frame building, 7 feet 6 inches by 125 feet by 6 feet.

Foundation under hot scrubbers of concrete and steel beams.

Q. What is the value of these buildings you have described, depreciation out?

A. $248,247.

Q. Have you also appraised the apparatus and contents?

A. Yes, sir.

Mr. MATHEWSON: We will also furnish a description of these items to counsel.

Q. Without enumerating the different items on the record will you state what the value of the apparatus and contents is as you found it, deducting the depreciation?

A. $268,177.

Q. Are there any connections at that plant?

A. Yes, sir.

Q. Will you describe them, please?
A. Cast iron pipes 4 inches to 36 inches in diameter, 5,861 feet.
Steel riveted pipes, 30 inches in diameter, 339 feet.
Wrought iron pipe, 1½ to 10 inches in diameter 5,552 feet.

Valves:

Four 3-inch.
Four 4-inch.
Twenty-four 3-inch.
Twenty-five 4-inch.
Thirteen 6-inch.
Ten 8-inch.
Ten 10-inch.
Two 12-inch.
Eighteen 16-inch.
Sixteen 20-inch.
Thirty 24-inch.
One 30-inch.

That is all.

1377 Q. What is the value of these connections?
A. $55,248.

Q. Will you describe the holders which you examined and appraised at or in connection with this 99th Street plant?

A. Yes, sir. Two holders 600,000 cubic feet capacity each; one holder of 300,000 cubic feet capacity; one holder 100,000 cubic feet capacity. All of the above holders are supplied with brick tanks and constructed upon a pile foundation.

Q. What is the valuation of those holders allowing depreciation where it has occurred?

A. $262,106.

Q. Are there other items to be added to obtain the full valuation less depreciation of this plant?

A. Yes, sir.

Q. Will you state what they are?

A. To the buildings, apparatus and pipe connections 10 per cent., amounting to $57,167.

Q. For what?

A. 10 per cent. for general contingencies.

Q. Engineering and so forth?

A. Engineering and so forth, yes sir. And an interest charge of 5 per cent. amounting to $31,441, making a total for buildings, apparatus and connections of $660,280. To the holders will have to be added for general engineering and so forth 10 per cent., amounting to $26,210, and an interest charge of 5 per cent., amounting to $14,415, making a total for holders of $302,731.

Q. Now what is the total value of the plant including buildings, apparatus, connections and holders to-day after deducting depreciation where it is found?

A. $963,011.

Q. Have you also examined and appraised the 18th Street plant of the Company?

A. Yes, sir.

Q. Near the North River?

A. I have.

1378 Q. A portion of that plant has been condemned by the city, has it not, Mr. Mayer?

A. Yes, sir.

Q. Will you first describe the portion of it which is still in the possession of the company and has not been condemned, if you have that separately?

A. Well, I have that now, separated entirely.

Q. Very good. What was the capacity of the plant and what kind of gas?

A. The original capacity was three million feet.

Q. Three million five hundred thousand feet, wasn't it?

A. Three million five hundred thousand feet, yes, sir.

Q. Coal gas?

A. Coal gas.

Q. Will you now describe the buildings which have not been taken by the city?

A. —.

Five small frame sheds in holder yard.

Engine and exhauster house, one-story brick building 36 feet 6 inches by 19 feet by 15 feet 6 inches, all 30 feet high.

Valve house, one-story brick building, 19 feet by 22 feet by 20 feet.

Boiler house, one-story brick building, 46 feet 2½ inches by 14 feet by 14 feet 3 inches.

One wagon shed, 21 by 28 by 15 feet of timber covered with corrugated iron.

One gas holder building of brick, 188 feet by 92 feet by 47 feet high.

Wood fences.

Coal storage yard between 18th and 19th Streets, 520 feet, about 9 feet high.

Coal storage yard between 17th and 18th Streets, 720 feet, about 9 feet high.

One brick wall across end of storage yard 12 inches thick, 180 feet.

One timber coal hoisting trestle complete in holder yard, between 18th and 19th Street.

600 feet of brick retaining wall, 12 inches thick, about 9 feet above grade.

1379 Q. Is that all the structures?

A. That is all for the buildings.

Q. What is the value of those buildings which you have described after allowing for depreciation?

A. $182,901.

Q. Have you also examined and appraised the apparatus and contents of the building?

A. Yes, sir.

Mr. MATHEWSON: We will also furnish a description of those items to counsel.

Q. Without enumerating the different items on the record, will

you state what the value of the apparatus and contents is as you find it, deducting the depreciation?

A. $14,019.

Q. Are there any connections at that plant?

A. There are.

Q. Describe them, please?

A. Cast iron pipes 20 inches in diameter, 1,890 feet.

Wrought iron connections, 1 to 3 inches in diameter, 360 feet.

Valves.

Eight 1-inch.

Three 2-inch.

Four 16-inch.

Twenty-six 24-inch.

Q. What is the total value of those connections?

A. $21,987.

Q. Have you also examined and valued the holders?

A. Yes.

Q. Please describe them and give their value?

A. Two holders each of 205,000 cubic feet capacity, and four holders each of 255,000 cubic feet capacity. Each of above holders is supplied with a brick tank constructed on pile foundations.

Q. What is the value of them?

A. $290,943.

1380 Q. Are the items you have given outside of the 10 per cent. engineering and 5 per cent. interest?

A. They are.

Q. Will you now state what additions there are, if any?

A. There is an addition for buildings, apparatus and pipe connections, 10 per cent. for engineering charges, &c., amounting to $21,890, and an interest charge of 5 per cent., amounting to $12,039, making a total for building apparatus and pipe connections complete, $252,836.

Q. Now, about the holders?

A. There is an additional charge of 10 per cent. for general engineering to the holders, amounting to $29,094, and an interest charge of 5 per cent., amounting to $16,000, making a total for holders of $336,037.

Q. Taking then what is the present value, allowing the depreciation where it has occurred and leaving out that portion which has been condemned by the city, including building apparatus and connections and holders, what is the value?

A. $588,873.

Q. Now, will you state what has been condemned by the city and give your valuation of the plant at 18th Street?

A. The way I arrived at the value of the original plant was by applying a unit figure of $340 per thousand cubic feet capacity of works, which price does not include any holders. The unit figure of $340 was ascertained by comparison with the 14th Street and 42nd Street coal gas works.

Q. The 18th Street manufacturing plant was a coal gas plant?

A. Yes; the total value of the plant thus established is $1,190,000.

Q. Of the manufacturing plant?

A. Yes; to this value must be added the holders, consisting first of those already referred to in the 18th Street plant, amounting to $336,037. Then the holders in addition to those mentioned which were contained in the original plant, consisting of four 250,000 feet holders, each in brick tanks on pile foundations, and one
1381 3,000,000 feet holder and steel tank with concrete and tile foundation. The four brick tank holders represent the total value of $223,590, and the 3,000,000 feet holder with steel tank, $347,281, making the value of the entire plant in the original condition, $2,096,908. From this figure should be deducted the value of the remaining portion of the 18th Street plant, amounting to $588,873, leaving the balance $1,508,035.

Q. You know that the 14th Street plant and the 18th Street plant were the property of the same company when the consolidation took place in 1884, do you?

A. Yes.

Q. Did you observe, as far as you were able to observe, any difference in the character of the plant so far as the cost of plant was concerned. You say you took the same figures?

A. It was practically the same plant as 14th Street.

Q. And you took the figures you found as unit values at 14th Street and 42d Street, which are coal gas plants, and applied them to the 18th Street plant so far as it had been condemned by the city?

A. I did.

Q. And it was open to your inspection?

A. No, it was not there; of course not.

Q. And you took this unit value and considered the capacity of the works and assumed that the works were of the same general character as the 14th Street and 42d Street works?

A. No, sir, I did not assume it was of the same character; I know that from my own knowledge.

Q. You knew that from your own knowledge?

A. Yes.

Q. In other words, you had seen the plant?

A. Many times.

Q. You had seen it many times before it was condemned?

A. Yes, many times.

1382 Q. So that you were entirely familiar with the character of the plant?

A. Absolutely.

Q. And do you feel confident that your estimate of $2,096,908 is a fair estimate, from your knowledge of the plant as it originally existed?

A. I am satisfied that it was a low value, because the value was based upon the estimated values of the 14th Street plant, and in the instance of the 18th Street plant the figure could have been proportionately higher on account of better facilities for handling coal, which are not included in the 14th Street plant. These facilities consisted of iron coal bunkers supported, alongside of the retort

house, upon iron columns, which is not the case in the instance of the 14th Street plant.

Q. This $2,096,908 includes, I assume, 10 per cent. for engineering expenses and 5 per cent. interest, in the same manner as similar items computed at 14th Street and 42d Street?

A. Yes.

Q. This completes, does it not, all the manufacturing plants of the Consolidated Gas Company? That is to say, where either coal or water gas has been manufactured?

A. Yes, it does.

Q. Are there in addition certain distributing holder plants or stations which you have examined and appraised?

A. Yes, there are five.

Q. Will you state what they are?

A. The 63d Street holder station, the 65th Street station, the 111th Street holder station, the 132d Street holder station, and the so-called Inwood station.

Q. Take the 63d Street station. Will you describe any buildings which there are there?

A. Do you want me to describe the buildings?

Q. Yes.

A. Engine room, frame building, 24 feet by 28 feet by 10 feet; valve house, frame building, 16 feet by 30 feet by 10 feet 6 inches; boiler house, 17 feet by 30 feet by 15 feet 6 inches. Brick
1383 fence walls, 440 feet, 10 feet above grade, 5 feet 6 inches below grade; that is all.

Q. What is the value of those buildings, depreciation deducted?

A. $11,429.

Q. What apparatus is there there? There is not much apparatus described, is there?

A. There is not many in this instance.

Q. State what apparatus is there.

A. In the engine room:

One 30-horsepower Morris engine, horizontal reversible.

One Sturtevant exhauster, steam and exhaust connections, countershafts and pulleys, gauges and connections.

In the valve house, one photometer.

In the boiler house:

One 66 feet by 16 feet Continental Iron Works boiler.

One Simplex Blake's pump, 6 inches by 10 inches.

One Metropolitan injector, pressure gauges, pipe connections and firing tools.

In the yards:

One Duplex pump, 10 feet by 6 feet; one drip water tank with two-inch pipe connections. That is all for that.

Q. What is the value of that apparatus, allowing for depreciation?

A. $4,828.

Q. Will you describe the connections there?

A. Yes, cast-iron connections 24 inches to 30 inches diameter, 225 feet; wrought iron connections, 1½ inches to 2 inches diameter, 80 feet; valves, two 24 inches and four 30 inches.

Q. What is the total valuation of such connections?

A. $7,887.

Q. Now describe the holders there.

A. One 3-million feet holder, one retaining wall 200 feet long, one brick tank for above holder, constructed in rock excavation. That is all.

1384 Q. What is the value of those holders?

A. $420,367.

Q. Does this include any allowance for engineering and interest?

A. No, sir, it does not.

Q. Please add those items and state what the totals are?

A. For general engineering I have only made a charge in the instance of holder stations of five per cent. instead of ten per cent., for the reason that I could not have overlooked as many items and omitted them from the schedule that I put in the plant, this being a very much simpler matter to examine.

Q. All the rest that you are about to describe are holder stations, including this 63d Street station?

A. On the same basis, five per cent. for general engineering and five per cent. for interest charges; the five per cent. for engineering amounts to $1,207 and the five per cent. for interest $1,267. That is on the station without the holders, making total value $26,618.

Q. For everything exclusive of holders?

A. Yes, five per cent. for engineering charges on the holders amounts to $21,018, and the five per cent. interest charges, $22,069.

Q. Making a total for holders of what?

A. $463,454.

Q. What is the total value to-day of the buildings, apparatus, connections and holders at the 63d Street station after deducting depreciation where you have found it?

A. $490,072.

Q. Take the 65th Street station and describe the buildings there.

A. Engine house, frame building, 20 by 38 by 20.

Exhauster house, two-story brick building, 37 by 42 by 45.

Boiler house, one-story brick building, 24 by 32 by 21.

Boiler house extension, one-story brick building, 16 by 20 by 16.

1385 Brick walls, 2,164 feet, averaging about 12 feet at different heights. I have the detail as to each height.

Q. The total value of the buildings and structures which you have enumerated at the 65th Street station is what?

A. $51,183.

Q. Will you describe the apparatus which you have appraised there?

A. Yes.

In the engine house, one beam engine, 6 inches by 18 inches.

In the exhauster house, one 12 by 12 Rowland vertical engine with steam and exhaust piping.

One 30-inch Mackenzie exhauster, gauges and connections, engine shafting and belts.

One photometer; furniture and plumbing.

In the boiler house, two horizontal tubular boilers 48 inches by 10 feet.

One horizontal tubular boiler 48 inches by 12 feet.

The above boilers are on brick settings.

One No. 2 Niagara feed pump 4 inches by 2½ inches by 7 inches.

One No. 4 Korting injector.

One steel stack, with connections to boilers.

In boiler house extension:

One 66 by 14 horizontal tubular inside fire box boiler and

One No. 5 Korting injector.

Q. What is the valuation of such apparatus and contents?

A. $10,159.

Q. Now, will you describe the connections at the 65th Street plant?

A. Cast iron pipes, 16 inches to 30 inches in diameter, 750 feet; and 260 feet of average 24-inch pipe.

Wrought iron pipe connection, 500 feet of 2-inch and less in diamater.

Valves, 23 30-inch and 4 16-inch.

Q. What are the value of such connections?

A. $20,406.

Q. Will you describe the holders at that station?

1386 A. Two holders, each 325,000 feet capacity; four holders of same capacity; two holders, each four million feet capacity. All of the above holders are constructed in brick tanks.

Q. What is the value of those holders?

A. $1,212,873.

Q. Does this include an engineer allowance and interest allowance in course of construction?

A. No, sir.

Q. Please state what, if anything, should be added on that account to get the full value?

A. There should be added to the buildings, apparatus and pipe connections, for engineering charges, 5 per cent., amounting to $4,087, and interest charges of 5 per cent., amounting to $4,291 making a total of $90,126, which is exclusive of holders. Now, to the holders there should be added for engineering charges 5 per cent., or $60,643, and for interest charges $63,675, making a total for holders of $1,337,191.

Q. What is the total value of the plant at 65th Street, including buildings, apparatus, connections and holders, and allowing depreciation which has been observed?

A. $1,427,317.

Q. Now, take the next one.

A. 111th Street?

Q. Take now the 111th Street station and describe the buildings there.

A. Office, two-story brick, 50 feet by 25 feet by 31 feet 6 inches.

Exhauster house, one-story brick, 66 feet by 54 feet by 27 feet 4 inches.

Boiler house, 44 feet 3 inches by 32 feet 3 inches by 18 feet.
One-story steel frame building covered with corrugated sides and roof.
Heating engine house, frame shed, 13 feet by 18 feet by 7 feet.
Scale house, plain work building, 12 feet by 15 feet by 13 feet.
1387 Stable, brick building with basement, 75 feet by 32 feet by 25 feet.
Coal storage; area, 67 feet by 52 feet.
Generator house, one-story brick, 72 feet by 48 feet by 27 feet.
Tool shed, frame building, 48 feet, 6 inches by 65 feet by 9 feet.
Retort house, brick, 200 feet by 52 feet by 22 feet.
Foundations for oil tank, 43 feet diameter, 11 feet high, of brick, 12 feet thick.
Blacksmith shop, brick, 26 feet by 34 feet by 19 feet.
Fences. Stable yard 270 feet of wooden fence 8 feet high.
Fence around holders 1,140 feet, 8 feet high.
Around works, 1000 feet, 8 feet high.
Brick wall on First Avenue, 56 feet by 8 feet high. That is all for the buildings.

Q. What is the value of the buildings without engineer or interest charges?

A. $107,981.

Q. Will you describe the apparatus and contents of what you have valued at the 111th Street station?

A. In the office building, office furniture consisting of desks, chairs, safes and wall maps, cupboards, letter presses, bath and toilet, steam radiators and gas fixtures. In the exhauster house, 42 valve stands for 36-inch and 24-inch valves; tool No. 11; 118 cubic, etc., 11,118 cubic feet, vertical Root's exhausters; two 16-inch by 16-inch Payne reversible link motion engines, 100 horsepower each direct connected to the exhausters.
Two 36-inch Connelly gas governors.
One Cochran feed water meter.
Steam exhaust and guage piping and gauges.
Plumbing and piping to steam heating radiators and piping.
One photometer.
Four closets.
1388 One toilet.
One wash basin.
Boiler house.
One steel stack; 4 feet in diameter, 64 feet 8 inches high.
Bridging for above stack.
Three boilers 66 inches by 16 feet, horizontal return tubular, 90 tubes each boiler, 3 inches diameter, 16 feet long, brick setting, ornamental cast iron fronts.
One Knowles pump 6 inches by 4 inches by 7 inches.
Beam and water piping for same.
One 1½-inch Hancock inspirator.

In the hoisting and engine house:

One Lidgerwood hoisting engine, double cylinder, 8¼ inches by 10 inches.

Scale house:

One 10-ton Fairbanks wagon scale.

Stable:

Stable fittings and appliances, thirty-two stalls and feed racks.

Tool shed:

Four old beam engines; lockers.
One lathe and tool bins.

In the retort house:

One stack of sixteen benches of six retorts each, length of retorts, 20 feet.
One stack of five benches of five retorts each; retorts 20 feet long.

In the blacksmith shop:

Forge and tools.

In the yard:

One oil tank; 43-inch diameter, 20 feet deep, of ¼-inch plates.
One atmosphere condenser of cast-iron pipe, 20 feet in diameter, in ten sections, with cast-iron bases and return bends at top, 18-inch connections.

1389 Q. What is your valuation of this apparatus which you have just enumerated?

A. $103,446.

Q. Will you describe the connections at the 111th Street station?

A. Cast-iron pipe, 24 inches to 36 inches, 550 feet; wrought-iron pipe, 1½ inches to 4 inches, 760 feet.

Valves:

Forty-one of 36-inch diameter, and one of 24-inch diameter.

Q. What is the value of such connections?

A. $27,068.

Q. Will you describe the holders at the 111th Street station?

A. Two holders, each 5,000,000 cubic feet capacity, with concrete foundations and retaining walls around lower portion of tank.

Q. What is the value of those holders without interest or engineer?

A. $704,737.

Q. Are there any items to be added to procure the full value?

A. Yes, sir. There are charges for general engineer, 5 per cent., to be added to the buildings, apparatus and pipe connections, amounting to $11,924, and for interest charges a similar amount of 5 per cent., $12,520, making the total for the buildings, apparatus and pipe connections $262,939. To the holders there is to be added for general engineer charges 5 per cent., amounting to $35,236, and in-

terest charges of 5 per cent., amounting to $36,998, making a total of $776,971.

Q. What then is the total value of the plant at 111th Street, buildings, appar-tus, connections and holders, after deducting any depreciation which you found?

A. The total for buildings, apparatus and pipe connections is $1,039,910.

Q. We will take now the 132d Street station. Will you describe the buildings there which you have valued?

A. One governor and boiler house, brick building, 100 feet by 49 feet by 29 feet.

1390 One stack for boilers, 125 feet high, 5 feet 6 inches and 6 feet 9 inches diameter.

Q. What is the value of those buildings?

A. $29,776.

Q. Without engineering charges or interest?

A. Yes.

Q. Will you now state the apparatus and contents at 132d Street which you valued. Is that long?

A. No.

One No. 11½-inch vertical exhaust, 122 cubic feet capacity with flexible coupling.

One 16½-inch by 24-inch horizontal Buckeye engine with reversing gear and outboard bearings, 150 horse-power.

One 24-inch Connelly gas governor.

Three B. & W. boilers, set in two batteries, each with 80 tubes, 4-inch diameter by 16 feet long.

One 6-inch by 4-inch Knowles duplex plunger pump.

One No. 6 Cochrane feed water heater.

One No. 10 steel plate breaching.

One 3-inch Crown water meter.

One No. 12 Metropolitan injector.

One blow-off tank, 3 feet diameter, 10 feet long.

One 8-inch Hudson exhaust head and steam exhaust, water and gauge piping in gauges.

One toilet wash basin and miscellaneous plumbing.

Q. What is your valuation upon this apparatus at 132d Street?

A. $18,979.

Q. Will you describe the connections at 132nd Street?

A. Cast-iron connections, 20-inch to 36-inch pipe, 2,400 feet.

Valves:

Nine 36-inch.

Seven 30-inch.

Six 24-inch.

Four 20-inch.

1391 Q. What is the value of the connections which you have just enumerated?

A. $47,714.

Q. Please describe the holders at 132nd Street.

A. One holder, 5,000,000 cubic feet capacity, on a concrete foundation with concrete retaining wall.

Q. What is the value of this holder and the structures in connection with it which you have mentioned?

A. $393,965.

Q. Do these figures at 132nd Street represent the real value of the property, or are the engineering and interest charges still to be added?

A. Yes, sir, such charges have to be added.

Q. Please state what the additions are.

A. The additions to the buildings, apparatus, and pipe connections for engineering charges are 5 per cent., amounting to $4,823, and for interest charges are 5 per cent., amounting to $5,064, making a total for buildings, apparatus and pipe connections of $106,356. For the holders, similar charges; for engineering, 5 per cent., amounting to $19,698, and for interest charges, 5 per cent., amounting to $20,683, making a total for holders and foundations of $434,346.

Q. What, then, is the total value of the plant at 132nd Street, including buildings, apparatus, connections and holders, deducting such depreciation as you have observed, if any?

A. $540,702.

Q. Will you now take up the Inwood station and say what buildings are there which you have valued?

A. Exhauster house in connection with dwelling, one-story building, 22 feet by 24 feet and 11 feet 4 inches and 24 feet high. Part of that was two stories.

Q. What is your valuation for those buildings, allowing any depreciation?

A. $3,230.

Q. Will you describe the apparatus at Inwood which you have valued?

1392 A. One six-inch Makenzie exhauster, six-inch connections, with countershafting.

One Smith & Sayre vertical engine, diameter of cylinder 4 inches, stroke, 6 inches.

One 12-inch governor.

One upright tubular boiler, 3 feet diameter by 6 feet high, containing 52 tubes, 1½ inches diameter.

Steam connections, pipe and steam fittings, steam and gas pressure gauges.

One Cameron pump, 3 inches by 5 inches.

Q. What is the valuation of this apparatus, exclusive of engineering and interest?

A. $1,640.

Q. Will you describe the connections at that station?

A. Cast-iron pipes 6 inches to 12 inches, 170 feet.

Wrought iron pipe 1-inch to 2-inch in diameter, 80 feet.

Valves, six 6-inch, four 12-inch.

Q. What is your valuation for such connections?

A. $923.

Q. Will you describe the holders at the Inwood station?

A. One holder 60,000 cubic feet capacity with brick tank.

Q. What is the value of this holder?

A. $17,948.

Q. Must any charges for engineering and interest be added to obtain the full value of this property at Inwood?

A. Yes, sir. Engineering charges amounting to 5 per cent. to be added to the buildings, apparatus and pipe connections would be $289; for interest charges at 5 per cent. $304, for the property at Inwood, exclusive of holders, making a total of $6,386. For the holder there would have to be added an engineering charge of 5 per cent., amounting to $897, and an interest charge of $942, making the total for the holder of $19,787.

Q. What is the total value of the Inwood station, including
1393 buildings, apparatus, connections and holders, allowing for any depreciation which has taken place?

A. $26,173.

Q. What is the total valuation covering all plants and stations respecting which you have testified, for buildings, apparatus, connections and holders, allowing depreciation out wherever it has occurred?

A. $17,040,524. This includes the 18th Street station in its original condition before a part of it was condemned by the city.

Q. Will you now state what such total valuation is, excluding that portion of the 18th Street plant which has been taken by the city and including that portion of the 18th Street station which still remains in the Consolidated Gas Company?

A. $15,532,489.

Q. In your testimony to-day you have first given figures for buildings, apparatus, connections and holders, not including any charge for engineering expense or interest?

A. Yes, sir.

Q. And I understand that such figures are not the real value of the buildings, apparatus, connections and holders respectively, but are merely preliminary figures to which must be added in each case the engineering charge and interest charge in order to get the full and actual value to which you have subsequently testified?

A. Yes, sir.

Q. So that when you or counsel have used the term "value" in referring to these preliminary figures, before addition of any engineering expense or interest, we are to understand that such figures do not in your judgment represent the actual value of the property, until engineering expense and interest have been added thereto?

A. That is right, yes, sir.

Q. And do I understand that in each case the final values to which you have testified are values obtained after deduction of any depreciation which has occurred?

A. Yes, sir.

1394 Q. You examined the property for depreciation in making your appraisal, did you not?

A. Yes, sir.

Q. And where you have spoken of buildings, or holders, or other

property, you have included the usual appurtenances as you found them?

A. Yes, sir.

Adjourned to 1:30 P. M., Wednesday, August 29th, 1906.

Last Exhibits:

Complainant's 233.
State's N.
City's 34.

1395 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

Met pursuant to adjournment.

NEW YORK, WEDNESDAY, *August* 29, 1906—1.30 p. m.

Present: The Master, Mr. Mathewson, Mr. Meade, Mr. Page, Mr. Burr, Mr. Kirby.

1396 Mr. MATHEWSON: I have a correction to make in Mr. Preiss's testimony. On page 1314 the total, $14,378,516, should be $14,305,916.

FREDERICK J. MAYER resumed.

The MASTER: You have finished your direct examination?

Mr. MATHEWSON: Yes.

Cross-examination by Mr. PAGE:

Q. Mr. Mayer, you state that in making the appraisal, and examination and valuation of this plant that you worked for six weeks day and night and Sundays and had twelve people helping you?

A. Yes, sir.

Q. I suppose that you measured the buildings yourself or had someone do it?

A. Well, my men did, yes, sir.

Q. In this time was included the time necessary to make the measurements of the various buildings?

A. Yes, sir.

Q. And as to the plant, you went through the plant and made a list yourself of the different things that were there?

A. No, my men made the list under my supervision.

Q. I mean, when I say you, I refer, of course, to the work that was done in this six weeks' time.

A. Yes.

Q. After the measurements were made and the list was prepared how long did it take you then to make the appraisal?

A. Why, I started on that from the first day; as soon as a section of the plant was finished it was sent to my office and I worked on the figures during the time the measurements for the balance of the plant were being made.

Q. Did you make any examination of the plant yourself?

A. Yes, sir, several of them.

1397 Q. Did you examine each plant to ascertain its condition?

A. Yes, sir, as near as I could.

Q. Did you make any inquiry as to how old the various apparatus and buildings examined by you were?

A. I did, yes, sir.

Q. Did you have any information as to the original cost of the buildings or apparatus?

A. I did not.

Q. In your appraisal, then, you based your estimate upon the prices of to-day?

A. I did, sir.

Q. Was it your object in making this examination to ascertain what a plant would cost to-day that would produce the results that these plants did?

A. Yes.

Q. And it was not, then, the valuation of this particular plant as it exists to-day?

A. Yes, it was a valuation of the plant.

Q. I understood you to say that you took as your method of valuation what it would cost to produce a plant to-day that would produce the results that this plant produces.

A. That is right, less the depreciation.

Q. And it is not a valuation of this particular apparatus with a view of what it originally cost, less depreciation?

A. No, sir.

Q. Then your appraisal was not of this plant, but it was an appraisal of a supposed plant that could be produced to-day, and some element of depreciation figured off from that?

A. Well, the same plant produced to-day, less depreciation.

Q. A good deal of this apparatus has been in use for a good many years, hasn't it?

A. Yes, sir.

Q. When was the 14th Street plant which you testified to yesterday built, if you know?

A. In the '50's; some parts as far back as 1853.

Q. What part of it was built in 1853?

A. The retort house.

Q. Did you have placed before you the inventory of this

1398 property that was made in 1884?

A. No, sir.

Q. Now, how did you arrive at the value of the buildings?

A. Well, I have constructed a great many gas works, and knew the cost of all those works I constructed. The latest built work that I constructed in this neighborhood was the works of the Kings County Gas and Illuminating Company in Brooklyn; that works was constructed in 1899. The class and character of buildings are very similar to the buildings of these various works, plain brick work with 4-inch projecting pilasters and ordinary coping at the top of the walls and wooden and iron roofs such as are generally used in gas works construction.

Q. What was the capacity of that plant?

A. That was a coal gas plant of a million and a half capacity; that is, originally a million and a half, laid out for three million; all the mains and principal details were arranged for three million, so it could be extended to that capacity.

Q. Now, did you base your cost on that as a three million capacity plant or one million and a half?

A. No, sir, I took each building by itself and ascertained the cost of such building per cubic foot of contents, figured from the basement line to the eaves of the roof; those were my unit factors applied in the other buildings of the various gas works now under consideration.

Q. You did not measure the walls and compute the number of bricks that would be in those walls?

A. No, sir.

Q. And the price of brick laid?

A. No, sir.

Q. I understand you assumed the Kings County works, to which you have referred, as a standard of cost?

A. I did not assume that. I knew that. That is a fact.

1399 The thickness of walls compares with the thickness of the walls of these buildings. They are practically the same.

Q. Well, I say you took that works as a standard, and using that as a standard, by the necessary multiplication produced the result that you have testified to here in regard to buildings?

A. Yes, sir.

Q. Now, what do you mean by per cubic contents?

A. Well, it is merely a factor that is easily applied; almost any other factor could be adopted, such as square feet of surface.

Q. Did you ascertain what was the cubic contents of the buildings —is that what you mean?

A. Yes, sir, I did.

Q. A building enclosed by walls of a certain dimension?

A. Yes.

Q. And what is the cubic air space within that building?

A. Yes.

Q. And what did you divide that by to get your standard after you had got your cubic contents?

A. I divided the price by the number of cubic feet, and that was the price per cubic foot.

Q. That would be the correct standard, would it not, if you were

building up a solid building of that cubic contents, but where you are enclosing a space in walls, does that give you the proper standard?

A. Yes, sir, of course; because the buildings from which I figure my value were hollow buildings; they were not solid buildings.

Q. Then, as I understand you, if the building of the Kings County works was fifty feet long on each side and twenty-five feet wide and, say, twenty-three feet high, you would get the cubic contents of that building?

A. Yes, sir.

Q. If the building at 14th Street was twice that length and the same width and the same height, then you would multiply that by two; is that right?

A. If it was twice the length?

Q. Yes.

A. Yes.

1400 Q. You would multiply it by two?

A. Yes, sir, if it was twice the length and the same width.

Q. And the same height?

A. And the same height, yes, sir.

Q. And you would take that as the cost then to be doubled?

A. Yes.

Q. Now, I call your attention to the fact, then, that you would be doubling the end walls of the building, would you not?

A. Well, there would be two end walls and a partition wall.

Q. No, not necessarily a partition wall. Why, a partition wall?

A. Didn't you say a building of twice the size? You mean one continuous building without any partition?

Q. Yes.

A. Then the price would be slightly reduced.

Q. Then you would not assume the standard that you have just testified you would, you would not double the cost of that building?

A. Well, it would be double, less a small omission for that brick in the partition wall.

Q. Well, would a wall twenty-five feet long and twenty-three feet high be a small deduction?

A. In that size building, yes.

Q. In that size building?

A. Yes.

Q. It is one-half the distance on one side of the first supposed building and a quarter the size of the entire side of the second supposed building, and if you doubled the two end walls you have got the size of the side wall on one building and half the side wall on the other. Do you consider that a small deduction?

A. The side walls would be absolutely twice the length of the other building and the gable walls would remain the same.

Q. But your side wall on the first building would be half the length of your gable wall and in the second building it would be a quarter the length of the gable wall, or if you doubled the two gable

1401 walls it would be only half the length of the two gable walls?

A. I cannot follow you. If you double the building the side walls are twice as long.

Q. If you sat down to estimate and bid on a plant would you figure in that way?

A. For an approximate figure I would, yes, sir.

Q. I am not speaking about approximate figures because I judge when you bid on a plant you do not make an approximation. If you were going to make figures to put in a bid to the Consolidated Gas Company for building a building, is that the way you would figure the original cost, the way you have testified here?

A. No.

Q. Now, Mr. Mayer, the firm of Bartlett, Hayward & Co., with which you were connected, has been doing the erecting work of the Consolidated Gas Company for some time past, has it not?

A. Yes, sir.

Q. You have built a large number of holders for them?

A. Yes.

Q. And your concern is now the principal contractor that is building the Astoria works at Astoria, Long Island.

A. My former concern. I am not with them now.

Q. You made up the bids for the Astoria plant, did you?

A. Yes.

Mr. MATHEWSON: You mean for Bartlett, Hayward & Company?

Mr. PAGE: Yes.

The WITNESS: Yes.

Q. As their chief engineer you prepared the bids which were put in?

A. Yes.

Q. And upon which the contracts were afterwards awarded?

A. Yes, sir.

Q. When did you cease your connection with Bartlett, Hayward & Company?

A. May first.

1402 Q. Of this year?

A. Yes, sir. Practically in December last before I went to Europe, but actually not until May first.

Q. What is your business now?

A. Consulting Engineer, making a specialty of gas works construction and special apparatus for gas works.

Q. I suppose your relations are still friendly with Bartlett, Hayward & Co.?

A. Very, I am glad to say, yes.

Q. In arriving at your valuation upon the plans, and by that I refer to the apparatus rather than the buildings, did you take also some standard of valuation like this Kings County Works?

A. I did.

Q. And you computed then that works that produce one million feet are worth so much, and works that produce five million are worth five times as much, is that the way you did it?

A. No, sir, I did not.

Q. Well, how did you? What figure did you use as a multiplier?

A. I figured on each and every apparatus and each and every con-

nection throughout the entire works, separately, and applied as a factor the particular cost of each apparatus.

Q. And the factor of cost you obtained by taking the cost price of the Kings County works, is that it?

A. I did not, only for the buildings.

Q. Well, I asked you that. Read him that question; probably he did not understand it.

Q. (Repeated:) In arriving at your valuation upon the plant, and by that I refer to the apparatus rather than the building, did you also take some standard of valuation like this Kings County works?

A. In a general way I applied a factor as I did in the Kings County buildings, but the factor for the apparatus is entirely different from the factor for the buildings.

Q. What is the factor for the apparatus which you ap-
1403 plied?

A. The weight of the apparatus, multiplied by a certain number of cents per pound.

Q. The weight of the apparatus multiplied by a certain number of cents per pound?

A. Yes, varying in amount as the apparatus varies.

Q. Well, you ascertained the value of the bench at 14th Street by that factor?

A. I know what the fire brick and the red brick are worth for a bench of sixes, with elevator furnace. I know what it cost for benches of fives with full depth furnace, and I know what it cost for a direct fire furnace. I add the iron work to those figures at a certain price per pound.

Q. Then, in estimating the apparatus you would not take it by weight entirely and multiply the number of pounds by a certain number of cents, would you?

A. No, they are partly brick work in the construction; you could not multiply it by a certain number of cents per pound.

Q. Did you take the price of brick as it is of today, or as it was in 1899?

A. I got the price of the bench complete from several fire brick manufacturers in New York, for what they would place those benches in position to-day, and to that I added my price for the iron work.

Q. Now, we will take up the retorts. How many benches are there in that?

A. Which one?

Q. 14th Street.

A. There is one retort house containing four stacks of thirty benches each.

Q. How many retorts to a bench?

A. I am just looking for another retort house. Do you just want to consider that one house?

Q. Is there more than one retort house there?

A. Yes, sir, I think there is. That is all for the benches.

Q. How many retorts to a bench?

A. Six retorts to a bench.

Q. That would make altogether 180, would it not?

1404 A. I beg your pardon; there is another stack of benches, twenty-four of those.

Q. With six retorts to a bench?

A. Yes.

Q. What is the size of the first 180 retorts that you have spoken of?

A. 12 inches by 21 inches by 8 feet 6 inches long.

Mr. MATHEWSON: In the first there are four stacks of thirty benches each. That would be 120, and six to a bench.

The WITNESS: 720 retorts in the first four stacks.

Mr. MATHEWSON: That would make 864, would it not?

The WITNESS: Yes; six times thirty times four is 720 in the first four stacks.

Q. 720 retorts in the first four stacks?

A. Yes, and there is [redacted] in the other stacks.

Q. What is the size of those?

A. 12 inches by 21 inches by 8 feet 6 inches.

Q. If you were to build a plant to-day would you put in that size retort?

A. Yes.

Q. You would I suppose if it were specified, but as a gas engineer, if you were to devise an efficient up-to-date plant, would you use that size of retort?

A. For that kind of installation I would, yes, if it was a horizontal installation and I had the space at my disposal.

Q. Well, this is a horizontal installation, is it not?

A. Yes.

Q. Do you know how long ago that was installed, those particular stacks?

A. It was built in 1900, the last stack.

Q. Of those particular four stacks?

A. Yes.

Q. How much was added at that time, or was it just a renewal?

A. Just renewal; replaced.

Q. Do you know when the others were replaced?

1405 A. I have it here 1900 for the entire house; I suppose they were all reproduced at that time.

Q. What do you mean by resetting?

A. That is a term applied to the construction of benches.

Q. And when it is so applied to the construction of benches what does it mean?

A. That the entire material inside of the arches was reset, or the entire arches are filled with new material.

Q. That means that the fire brick is built in of which the retort is built?

A. Fire bricks, retorts, tiles, and settings; everything complete.

Q. You spoke of fire brick and the retort as something separate. Is not the retort made of fire brick?

A. No, sir.

Q. What is it made of?

A. Fire clay.

POOR COPY

Q. When you burn it it becomes fire brick, don't it?
A. No, sir, in that shape it don't.
Q. Everything else then was old, as I understand it, except that the retort inside the arches was filled with fire clay and the retort built, but the brick work was the same as it has been for a number of years before, and the size within the arches was the same?
A. The arches themselves formed the old brick work.
Q. When you refer to the arches to what particular arch do you refer? The arches that are below the retorts or the arches within which the retorts are placed?
A. Each bench consists of an arch built of fire brick, and the arch consists of two side walls and the arch on top, and the entire space within this arch is filled with setting. The setting consists of retorts, &c.
Mr. MATHEWSON: Is there any arch below?
The WITNESS: There is not.
Mr. PAGE: There is an arched space, is there not?
A. An arched space all above.
1406 Q. Then there is not an arch, as you refer to it, for gas making, but there is an arch that an ordinary man would see there and call it an arch, is there not?
A. Yes.
Q. Wherein does resetting differ from tearing down and rebuilding?
A. That is what it practically is. We tear out and rebuild the entire setting.
Q. The setting?
A. Yes, take everything that there is and replace it all new.
Q. What is taken down and what is left standing?
A. The entire interior work contained in the arch is taken out and rebuilt from new material.
Q. How frequently, in the ordinary operation of a gas plant, do you have to thus renew the retorts?
A. About every three years.
Q. And you say the last of that which was done here was when?
A. 1900, but it has been reset since then later, I believe.

By Mr. MATHEWSON:

Q. Look at your memorandum there, if it is a copy of this, and you can find it.
A. I have it 1900. (Mr. Mathewson indicates on the memorandum). Yes, there is something in 1904 and 1905.

By Mr. PAGE:

Q. The brick work within which these arches are fixed is the same as it has been for a great many years?
A. Yes.
Q. And when you refer to resetting it is merely a renewing of the retorts that takes place about once in three years?
A. Yes.

Q. And otherwise than that those first four coal stacks are the same as they were in 1884?

A. That I could not say, it is possible that the entire arches have been rebuilt since that time.

1407 Q. Of course all things are possible. I was asking for your information if any has been given you. I understood that you had been informed when those different buildings had been built.

A. Yes, I have been.

Q. For what period did you measure depreciation upon this particular apparatus?

A. In some of it, for a few years only, some three years, and some perhaps eight or nine years; the depreciation varies from two to 15 per cent.

Q. But some of these have been standing from 1853?

A. No, it has all been rebuilt since 1853.

Mr. MATHEWSON: Not the apparatus; he said the buildings.

The WITNESS: That is, the buildings alone, yes.

Q. But your valuation for the buildings; did you figure depreciation there?

A. Yes.

Q. On these retort houses?

A. Yes.

Q. How much depreciation did you figure?

A. 15 per cent.

Q. Why did you use 15 per cent. depreciation? How did you arrive at that?

A. That is my judgment from the appearance of the building.

Q. That is, this building that has been constructed for fifty-three years you consider to-day is depreciated only 15 per cent.?

A. Yes, for the reason that the building was kept in constant repair in order to serve its purpose.

Q. Did you make any examination of the result of this plant to see whether it was operating efficiently?

A. I know that from my own personal knowledge.

Q. You know that; so you didn't have to investigate that?

A. No, sir.

Q. How many pounds of coke does it take to carbonize 100 pounds of coal in an efficient horizontal retort?

1408 A. From 10½ to 55 pounds of coke to 100 pounds of coal carbonized.

Q. You would make a rate of 10½ to 55 pounds?

A. Yes.

Q. And if a plant was using 55 pounds of coke to carbonize 100 pounds of coal would you think that an efficient plant?

A. No, sir, I would not.

Q. Will you kindly pay attention to the questions and answer the questions that I ask you? I asked you how many pounds of coke it would take to carbonize 100 pounds of coal in an efficient horizontal retort. That is the question. Now, what some man could produce is something that was not efficient is not the question.

A. About twenty-two pounds.

POOR COPY

Q. You would differ then from Mr. Bradley, who said it would take from 10 to 15 pounds?

A. In a full depth generator furnace.

Q. What do you mean by that?

A. A furnace of considerable depth, with generating flues below the settings. Those benches are ordinary 4 by 5 benches.

Q. If you were installing a plant to-day, would you use these generator flues below the settings?

A. I would not.

Q. You would not instal this particular plant to produce efficient work to-day?

A. I would not, not so far as the furnace is concerned.

Q. That is what I mean. We are confining ourselves to this particular retort house. Now, how about the size of these retorts? Would a large size produce better results?

A. No; I should apply the same size retort in the same space, and the building controls the space.

Q. You say a 12 by 21 by 8 feet 6 inches is the size retort that you would use to-day if you were installing a gas plant?

A. Yes, in benches of sixes.

Q. Do they use benches of sixes now?

A. Yes.

1409 Q. I notice that one coal gas stack of twenty-four benches, six retorts, the size is 15 by 26 by 9 inches?

A. Yes, sir.

Q. Can you produce better results with a retort that size than you can with a retort the size of the other 720?

A. No.

Q. You would testify, then, as a gas engineer that the operation of a retort 12 by 21 by 8 feet 6 inches is as economical and produces as good results as a larger retort?

A. Yes.

Q. What is the shape of these retorts?

A. They are D-shaped.

Q. What is the size of the retorts that you installed in Astoria?

A. They are tapering retorts, as near as I can remember, about 14 by 22 inches on one end; I am not sure about that, and I think about 14 by 25 on the other end.

Q. By tapering retorts you mean a modification of the D-shaped?

A. No, it is tapering in length from one end to the other. It is a D-shaped retort.

Q. I am referring now to the horizontal and not to the inclined.

A. I did not instal any horizontal retorts in Astoria.

Q. The horizontal and inclined are two different things?

A. Yes; I did not instal any horizontal retorts at Astoria.

Q. Did you make any estimate on the horizontal retorts that they have over there?

A. I did not.

Q. What value do you place upon the benches?

A. $2,210 per bench.

By Mr. MATHEWSON:

Q. Does that refer to the four coal gas stacks?
A. Yes; thirty benches each.

By Mr. PAGE:

Q. Did you estimate this value as you would if you were
1410 bidding to build those benches?
A. Absolutely the same way.
Q. That includes the masonry and the ironwork and everything in regard to the bench, does it?
A. Except the foundations.

By Mr. MATHEWSON:

Q. Do those preliminary figures include the engineering expenses and the interest which you applied subsequently?
A No, sir, it does not.

By Mr. PAGE:

Q. Were you building gas works in 1884?
A. Yes, I think I was.
Q. Do you know whether it would cost as much or more or less in 1884 to have built these benches than it would to-day?

Mr. MATHEWSON: Objected to as not proper cross-examination. We called the witness here to prove the value of this property to-day, as an expert witness. We have asked nothing in reference to the cost in 1884.

Mr. PAGE: While you may have asked nothing of this particular witness, you put in evidence what it was valued at in 1884.

Mr. MATHEWSON: This witness is an expert witness, called upon that particular subject.

Mr. PAGE: Well, I think that goes to his competency and the weight of his testimony.

Mr. MATHEWSON: I do not agree with you.

The MASTER: I do not know that I quite follow you as far as that, Senator, but I think you are entitled to ask him the question. It may be you will run the risk of making him your own witness on that point. I will allow it.

1411 Mr. MATHEWSON: I would suggest that counsel make this witness his own in that connection, if the witness can answer.

Mr. PAGE: I will take the risk of that, as a proposition of law.

A. It would cost more in 1884.
Q. Now, have you figured a certain amount for depreciation on these benches?
A. Yes, sir.
Q. What is the amount?
A. Some of them, 15 per cent.
Q. On what?
A. On all of them 15 per cent.
Q. And upon what did you base that figure?

POOR COPY

A. Principally upon the present condition of the arches and the ironwork.

Q. And that is the part that has to be renewed every three years?

A. No, sir; that is the part that has to be renewed probably every thirty years.

Q. You would expect the resetting of the retorts to be taken care of under repairs?

A. Yes, sir.

Q. It would come under that item?

A. Yes, sir.

Q. And you think that this plant standing as it is to-day has depreciated to the extent of 15 per cent?

A. These particular benches, yes, sir.

Q. Does your value of $2,210 per bench include depreciation or do you take that off?

A. No, sir, that is taken off afterwards.

Q. What is the value to-day that you have for those?

A. I only have it in total. The total benches for the four stacks of 30 is $265,200, without depreciation, and $225,420 with depreciation taken off.

Q. Have you the other 24 benches?

A. Yes, sir. Those benches cost $2,450 each, making a total of $58,800, and the depreciated value is $49,980.

Q. You say they cost what?

A. $2,450 per bench.

Q. When?

A. As compared with the $2,210 I gave for the other benches.

Q. Well, that is the estimate you placed upon the cost and
1412 not the actual cost, is that it?

A. No, sir, that is the actual cost I got from various firebrick manufacturers around this part of the country, to which I added the cost of the ironwork.

Q. You don't know what it really cost the Consolidated Gas Company to install that stack of benches?

A. I don't, but I imagine they would pay more than I would.

Q. Do I understand you called for bids or asked for bids from various manufacturers, on which you based this estimate?

A. Yes, sir.

Q. Then you did not depend upon your experience of so many years as a gas engineer as to what it would cost, and as a man who constructed so many works?

A. I should do exactly the same if I had to build the works to-day, I should have to go to some firebrick manufacturers and get their prices, and buy their material for that part of the work and then add my prices for the ironwork.

Q. You referred to the foundation for benches. Just what is the foundation for the benches?

A. Is this 14th Street?

Q. I mean generally. Do you mean that portion that is down underground?

A. Yes, sir. It is that portion below ground.

By Mr. KIRBY:

Q. Are there any foundations for other than the benches you have mentioned?

A. Yes, sir.

Q. How many?

A. There is one foundation for each stack.

Q. Are there any foundations upon which stacks have not as yet been erected?

A. No, sir.

Q. How many foundations does that make altogether?

A. Five.

Q. How many benches stand upon those foundations to-day?

A. Well, on four of them there are thirty benches; and on one, twenty-four benches.

1413 Q. So there are fifty-four benches?

A. Oh, no, there are four times thirty, which is one hundred and twenty, and then twenty-four is one hundred and forty-four.

Q. One hundred and forty-four benches?

A. Yes, sir.

Q. What depreciation factors did you use in the foundation?

A. None.

Q. Simply estimated the cost of material and labor as it was given to you?

A. Well, it is very hard to give any information regarding foundations under benches, or in fact under anything.

Q. How did you get your information?

A. By general inquiry at the works, from which I learned that everything is put upon pile foundations. Of course, the piles have to be cut out at the water line to prevent them from rotting, and that gives me the length as to the foundation, and on these facts I estimated the cost.

Q. Did you get that from the Consolidated Gas Company?

A. I got it from the superintendent that was there when it was built.

Q. And then did you give that information to various contractors and receive bids from them?

A. No, I made my own estimate.

Q. With regard to the stacks, however, you got your information from other contractors, did you not?

A. Yes, sir.

Q. Have you ever put down tiles of any kind?

A. Yes.

Q. Have you estimated on work of that kind?

A. Yes, sir.

Q. What is the age of those foundations, do you know?

A. I think they were built in the fifties.

Q. Would they cost more or less then to put down than now?

Mr. MATHEWSON: Same objection.

1414 The MASTER: Same ruling.

Exception.

POOR COPY

A. I don't think there would be much difference in the price for foundations.

Q. How many foundations were there there?

A. Five.

By Mr. PAGE:

Q. As part of the cost of the coal stacks, do you include the hydraulic main?

A. It is included in the benches.

Q. Then that estimate of yours covers everything in regard to the apparatus for making the gas and carrying it through the hydraulic main?

A. Yes, sir.

Q. What value did you set upon the stoking machines? If you have them separately, you might give them separately.

A. There are four; $16,000.

Q. That is $4,000 each?

A. $4,000 each, yes, sir. There is another one at $4,400. That is the one for the large stock.

Q. What about the De Brower stoking machine?

A. $10,500.

Q. How old are these machines?

A. That I can't tell.

Q. What depreciation did you figure on them?

A. Five per cent.

Q. How did you arrive at that figure for depreciation?

A. That is more depreciation than ought to apply because the machines have got to be kept up in a complete state of repair, always in order, to maintain their working capacity.

Q. And are they in a complete state of repair?

A. They are.

Q. What about the drawing machines? How much for the five Ross drawing machines?

A. $25,000.

1415 Q. That is $5,000 apiece?

A. Yes.

Q. And the large——

A. $5,400.

Q. On these drawing machines, I want the age of the drawing machine and the amount of depreciation. Have you figured it?

A. Five per cent. on the machine for the large stack and 2 per cent. on the five machines for the other stock.

Q. How did you arrive at those two items of depreciation?

A. My judgment of the conditions of the machines. As I said before I think the depreciation applied is more than it ought to be.

Q. That is, your judgment now as to the depreciation is different than what it was when you examined the machines and made up your figures?

A. No. You cannot exactly determine the value of depreciation and in order to be absolutely fair I took the outside figure which I thought would apply. I could have applied less and had the same opinion.

Q. Do you know how old those machines are? How long they have been in use?

A. No, I didn't ask about that because these machines have been kept in perfect condition continuously.

Q. They have been?

A. They have been, yes. Of course there is small wear and tear and repairing which at the present day I cannot just exactly establish. Five per cent. would be an outside figure.

Q. Now, we will go to these turntables. For what are they used?

A. For transferring the stoking and drawing machines from one side of the house to the other.

Q. What is your value of those?

A. $630 each.

Q. Any depreciation on those?

A. Five per cent.

Q. Is that figured on all these items relating to the track?

A. Yes, sir.

Q. There are six lines of track running the length of the building and 20 feet outside?

A. Yes, sir.

1416 Q. Seventy-pound rails, 6 by 8 cross ties?

A. Yes, sir.

Q. These on 6 by 8 stringers?

A. Yes, sir.

Q. What do you value that line of tracks at, so equipped?

A. Six lines, $5,050.

Q. Now, these coke tracks?

A. Four lines of coke tracks, $1,350.

Q. They only run the length of the retort house, is that right?

A. The length of the retort house and then the inclines outside of it which follow right after.

Q. How long is the entire length of the four lines of track—is it the length of the building plus thirty-two feet?

A. Yes, sir, in one instance, and I think forty in the other. That is, you will find two more down below forty feet.

Q. Two of them are thirty-two feet longer and two of them forty feet longer than the building?

A. Yes, sir.

Q. What do you mean by 3½-inch rails multiplied by 35 pounds?

A. 3½ inches, that is the height of the rails, by 35 pounds per yard.

Q. What is the value of these two coke dumping inclines over thirty-two feet long and sixteen feet high?

A. $1,500.

Q. That includes the gauge, benching arrangements and the 2-inch pipe, does it?

A. Everything complete.

Q. In connection with that you have two engines, have you, seven horse-power engines?

A. Yes, sir.

Q. And that, together with the operating cable, is worth how much?

POOR COPY

A. $450.

Q. How much are the nine self-dumping coke machines worth?

A. $1,125.

Q. That is the entire nine?

A. Yes, sir.

Q. What value did you place upon the forty feet of coke dumping inclines, twenty feet high?

A. $2,070.

1417 Q. And on the coke drums and hoisting arrangement and countershaft connected to the gas engine?

A. $380.

Q. And the 2-inch pipe clinching arrangement?

A. $50.

Q. And upon all those I understand that you figure a net depreciation of 5 per cent.?

A. Yes, sir.

Q. Do you know whether these five Ross Drawing machines are the same that were in use in 1884?

A. I do not.

Q. The next thing in the process of gas manufacture would be to go to the exhauster house, wouldn't it?

A. Yes, sir.

Q. Now the contents of this exhauster house were one Number 9 Roots exhauster, 24-inch connections, by-pass, exhauster direct-connected to engine, 3,500,000 cubic feet capacity, including the engine. What value do you place on that?

A. $1,980.

Q. How much do you allow for depreciation?

A. None.

Q. Do you know how old that is?

A. No, sir.

Q. But you consider it just as good to-day as the day it was put in, no matter how long ago it was?

A. It is absolutely perfect in every respect.

Q. Then there is another Number 6 Roots exhauster?

A. Yes, sir.

Q. Direct connected to the engine, 20-inch connections with by-pass, capacity 2,000,000 cubic feet.

A. Yes, sir.

Q. How much did you value that at?

A. $1,078.

Q. There are two Huntoon governors?

A. $150.

Q. Those are attached to each of the exhausters or attached to the engine?

A. They are attached to the engine and governed by the gas.

Q. What do you value the photometer, stand and bar at?

A. $65.

Q. What kind of a photometer is that?

A. Bar photometer.

1418 Q. What is the length of the bar?

A. I did not measure that.

Q. Is it one or two candles?
A. It is arranged for any candles you like.
Q. But as against testing gas, against one candle or two candles?
A. You can test any candle power from nothing up to thirty candles and even higher.
Q. I know that. You test your light, though, on one end of your photometer as against a candle on the other, one or two candles, don't you, when you are using a bar photometer?
A. Yes, sir.
Q. I asked, is this arranged for one or two candles?
A. Well, you can apply either.
Q. This just refers to the machine itself, does it?
A. The contents of the exhauster house?
Q. No, I say this one photometer, stand and bar, $65, refers to the machine itself?
A. Yes, sir, purely the apparatus.
Q. Now in the condenser house you have two No. 2 rectangular condensers, cast iron tubes, 44 feet by 15 feet by 6 feet 2 inches; 648 tubes, 4 inches in diameter 11 feet long, 30-inch connections. At what do you value those?
A. $29,106 for the two.
Q. And upon that you figure a depreciation of how much?
A. 15 per cent.
Q. Do you know the age of this apparatus?
A. No, I do not.
Q. Would that cost more to-day than it would in 1884?

Mr. MATHEWSON: Same objection.
The MASTER: Same ruling.
Exception.

A. Yes, it might cost a little bit more.
Q. When?
A. Now.
Q. It would cost more to-day than then?
A. Slightly more, not very much.
1419 Q. Do you know whether those are the same two condensers which were there in 1889?
A. I do not.
Q. Is that the type of condenser that is used to-day?
A. Yes, sir.
Q. Does the value which you have given include the valves and connections?
A. No.
Q. Have you valued the valves and connections separately?
A. Yes, sir.
Q. What does this mean, by connections 30 inches?
A. That is only a memorandum to show the size of connections for the apparatus.
Q. Then the value that you gave of $29,106, would be the value of the two condensers alone?
A. Yes, sir.

POOR COPY

Q. Now there are two purifying houses are there?
A. Yes, sir.
Q. Now the large purifier house, I find two sets of 8 purifying boxes 24 feet by 26 feet by 3 feet 2 inches, connections 20 inches?
A. Yes, sir.
Q. What do you value those at?
A. Well the entire two sets together with the covers and the cranes and the supports for the boxes and center seals is $48,876 without any depreciation.
Q. You value those in their entirety?
A. Yes, sir.
Q. What is the capacity of that purifying house?
A. I have not figured that, but the capacity of the two houses combined is equal to the capacity of the plant.
Q. In other words, the capacity of the purifying house determines the capacity of the plant, doesn't it?
A. In a measure, yes.
Q. Now the small purifying house?
A. One set of 4 boxes 16 feet by 25 feet by 3 feet 2 inch center seals, supports, and two hydraulic cranes, $16,828.
Q. That includes the supports and pressure gauge, does it?
A. Yes—no, the pressure gauges are extra, $35 for that small house.
1420 Q. Do you know the age of the apparatus in these two purifying houses?
A. I do not.
Q. Upon what do you figure your 5 per cent. depreciation?
A. Upon the present condition of the apparatus.
Q. That is, if it was regarded as against a new apparatus to-day you think there would have been a depreciation of 5 per cent.?
A. Yes.
Q. In its present condition?
A. Yes.
Q. And you have not taken into consideration in figuring depreciation the actual age of the apparatus?
A. No, I have not for the reason that age does not affect an apparatus of this kind except in one spot, and that is the sides of the covers which forms a very small portion of the entire purifying apparatus.
Q. Therefore, there is with the exception of the sides of the covers, which when they wear out were replaced as repairs——
A. But very little cost.
Q. But very little cost?
A. Yes, sir.
Q. There is practically no depreciation on a purifying plant?
A. No, sir.
Q. I find you have center seals in the purifying house and you also have a center seal house. To what use is this center seal house put?
A. In this instance the center seal is located outside of the building. The center seal is an apparatus which controls the flow in and out of the various purifiers. In some instances it is located under the

purifier itself, but in this instance it is located outside the building in a small annex surrounding it.

Q. Is there a center seal within the purifying house and another one outside?

A. Just outside the purifying house in a small annex around it.

Q. Is there one inside and one outside?

A. No, sir; only one to each purifier.

1421 Q. Then the center seals you have testified to in each purifying house would be the center seals as spoken of in the center seal house?

A. Yes.

Q. And there would be no separate value for the center seals contained in that house?

A. No, the center seal is included in my valuation of the purifiers, but no connections.

Q. I understand that, your connections in all cases have been the valuation you gave at the end for yard connections and valves?

A. Yes.

Q. And that applies to all the apparatus?

A. Yes.

Q. I notice in the yard two tower scrubbers, 20 inches in diameter by 84 feet 2 inches over all, capacity of each one million cubic feet per twenty-four hours?

A. Yes, sir.

Q. Eight sections of eight trays each, except lower, which has seven trays; connections 24 inches. Have you valued that separately, or did you value it in connection with the tower?

A. I figured the two scrubbers as an entirety without any connections and valves the same as in the other cases.

Q. Will you give the valuations as you have placed them there upon the items?

A. Two scrubbers, $40,390; a 14 foot water tank on top of the scrubbers, $1,764; a circular stairway enclosed in a steel shell, $672, making a total of $42,826.

Q. What do you value the foundation at?

A. $7,854.

Q. Have you figured anything for depreciation on this?

A. Eight per cent.

Q. Do you know anything about the age of those scrubbers?

A. No, sir.

Q. Do you know whether or not they are the same two tower scrubbers that they had in 1884?

A. Yes.

Q. Are they?

A. I believe they are.

1422 Q. How did you figure the brick circular walls from top of concrete to ground level, 6 feet from ground to bottom of concrete?

A. In which item is that?

Q. In the foundation.

POOR COPY

A. 800 cubic yards of excavation, 300 piles, 300 cubic yards of concrete and 52,000 bricks and the granite sills.

Q. What value did you take for those?

A. $7,854.

Q. I know, but——

A. The units?

Q. Yes.

A. Excavation $1.25 per cubic yard, piles $5.00 each; concrete $7.00 per cubic yard; bricks laid $25 a thousand.

Q. Is that based on bids you received?

A. No, sir, it is my own estimate.

Q. On the prices of to-day?

A. Yes, sir.

Q. Now there is another scrubber, Isbell Porter, standard scrubber?

A. Yes.

Q. That is a rotary scrubber, is it not?

A. Yes, sir.

Q. 16 feet 6 inches long, 13 sections, end section 7 feet 9 inches wide by 8 feet two inches high; disc 6 feet 9 inches diameter by 8, capacity 3,000,000 cubic feet for twenty-four hours, 30-inch connections 7 feet 7, 4 inches diameter?

A. That means 7 inches by 7 inches.

Q. 4 inches diameter, shaft, worm gear and wheel connections, wheel 48 inches diameter. What did you value that at?

A. $6,860.

Q. What did you allow for depreciation?

A. 2 per cent.

Q. How old was it?

A. 1892 I have it down here.

Q. Two number 2 Cameron pumps; what are they worth?

A. $110.00.

Q. Each or for the two?

A. Both.

Q. How many station meters have they at these works?

A. 2 sixteen feet diameter.

Q. Will you give the value, please?

A. $13,540. They are 16 by 13 feet.

1423 Mr. BURR: Is that for each or for both?

The WITNESS: For both.

Q. That is American meter make?

A. Yes, sir.

Q. And Parkinson drums?

A. Yes, sir.

Q. 20-inch connections?

A. Yes, sir.

Q. One No. 12 Westinghouse gas meter?

A. Yes, sir.

Q. What is that?

A. It answers the same purpose, but is differently constructed, $225.

Q. Then the value of the other articles in the meter house?

A. Kings pressure gauge, $35. Iron grating, platform around meters $315.

Q. We have practically gone through the apparatus through which the gas itself passes, have we not, from the retort to the holder?

A. Yes.

Q. Now will you turn to your schedule of the boiler room?

A. Yes, sir.

Q. And give us the value of the boiler?

A. $2,109.

Q. That is an 80-horsepower boiler?

A. Yes, sir, that is what it is rated.

Q. And built by T. F. Rowland?

—. Yes, sir.

Q. Do you know the age of that boiler?

A. No. That is in a thoroughly up-to-date condition.

Q. But if it was built by T. F. Rowland it was some years ago that it was built?

A. Yes, sir.

Q. How many should you say?

A. I did not inquire because the boiler was in perfect condition.

Q. How long ago did Rowland retire from business, do you know that?

A. No, I do not.

Q. Now will you give us the various items of the engine room. Was there anything else that entered into the boiler room?

A. No, there is one Clark steam and fire regulator at $25. A cast iron water tank 17 feet by 48 feet by 4 feet 6 inches deep over the entire boiler house, which forms the roof of the latter.

1424 Q. How much is that worth?

A. $4,275.

Q. Did you take any depreciation off from either of those items?

A. Five per cent. on the boilers, none on the regulators, and two per cent. on the cast iron tanks.

Q. Now, then, the engine room. You have first a forced draft fan for blowers, B. F. Sturtevant fan and engine, 3-foot fan and wheel, case 18 inches wide, direct connected with small vertical engine. What value did you place on that?

A. $250.

Q. Anything off for depreciation?

A. Two per cent.

Q. One simple engine, Novelty Iron Works, 50 horsepower?

A. $3,000; twelve inches diameter, two-inch stroke. It is a special engine.

Q. Two small boiler feed pumps.

A. $100.

Q. Two jet photometers at $65 each.

A. $130.

Q. Mackenzie exhauster?

A. $924.

Q. Sink?

A. $25.

POOR COPY

Q. Now, will you take the items on the various portions of the plant that have not been covered and give us the value, age, and depreciation as far as you know it, on every item of over a thousand dollars in value. Below that you need not.

A. Any item of over a thousand dollars?

Q. I mean, not to go back, but taking up here in the smith shop, machine shop and shed, &c.

A. I could give you the total items for that. Machine shop total contents?

Q. No, if there is nothing there over a thousand dollars just pass over it.

A. I have got one shed.

Q. The whole shed only amounts to $1,800. Everything that is in it?

A. Everything in it.

Q. I mean in the matter of items.

A. Oh, individual items.

Q. Yes. You have given, as I understand it, the total value of everything that is in these particular houses, the buildings, on your direct-examination.

A. Yes.

1425 Mr. KIRBY: He gave the total value of all.

The WITNESS: I gave the total value of all, not of each house.

Mr. MATHEWSON: Not dividing it into each separate house?

Mr. KIRBY: Let it be where there is apparatus of over a thousand dollars, and give that.

Q. Yes, give us the total of each house, and where in that house there is apparatus of the value of a thousand dollars and over you can give us the total of that.

Mr. MATHEWSON: Would it not be a good thing to give that in the order in which they appear on the record; taking the office, store and then the boiler room, &c.?

The WITNESS: That is what I was going to do just now, start from the beginning.

The MASTER: That is the better way, then you will have it complete on the record.

A. Office building, contents $1,875.

Mr. MATHEWSON: Are you giving those items without depreciation or after the deduction of depreciation? Is the total you are giving the value without deduction of depreciation or after the depreciation is deducted?

Mr. KIRBY: He had better give both.

Mr. MATHEWSON: I am merely asking him so that he can find out what you want. I do not care what he gives.

Q. Give the total with depreciation and then the total deducting depreciation?

A. With and without depreciation?

1426 Q. Yes, both.

A. Contents of office building without depreciation, $1,875; with depreciation, $1,781. Storehouse, contents, $100; with depreciation, $100.

Mr. PAGE: We have had the boiler room and the engine room.

Mr. MATHEWSON: But he has not given the totals.

A. (Continuing:) Machine shop, $700 without depreciation; $665 with depreciation.

Smith shop, $430 without; $408 with.

Grindstone, $395 without; $356 with.

Mr. PAGE: We do not want the value of the grindstone at $395. It is grindstone, circular saw, lathe, turning tools, counter shaft, &c.

The WITNESS: Yes.

Mr. MATHEWSON: When you state your value, describe what it is.

A. (Continuing:) Shed, contents, $1,800; no depreciation.

Large purifier house, $48,876, less depreciation, $46,432.

Small purifier house, $16,828 without depreciation; $15,987 with.

King's pressure gauge, $35, no depreciation.

Meter house, we had that before.

Centre seal house, four King's pressure gauges, $140; no depreciation.

Pressure gauges, $140; no depreciation.

Checkered cast-iron runway around seals, $258; no depreciation.

Mr. BURR: You have left out the Smith & Farmer's duplex dry centre seals, 20-inch connections.

1427 The WITNESS: They are included in the price of 24 feet by 26 feet purifier house.

Boiler house, one locomotive boiler and tools, 35-horse-power 5-inch diameter shell, 14 feet 7 inches long, sixty 3-inch tubes, without depreciation, $1,918; with depreciation, $1.726.

By Mr. KIRBY:

Q. Do you know the age of that boiler?

A. I have not got it down here. I had it when I made up my schedule, but I did not put them all in.

Valve house, contents, $335, no depreciation.

Retort house, four coal gas stacks, 30 benches, etc., without depreciation, $265,200, with depreciation, $225,420.

One coal gas stack, 24 benches, etc., without depreciation, $58,800, with depreciation, $49,980.

Four Bronder stoking machines without depreciation, $16,000, with depreciation, $15,200.

One Bronder stoking machine, $4,400, with depreciation, $4,180.

One De Brower stoking machine, without depreciation, $10,500, with depreciation, $9,975.

Five Ross drawing machines without, $25,000, with $24,500.

One Ross drawing machine without $5,400, with $5,130.

Three extra engines for retort house, $705 for the three, no depreciation.

POOR COPY

Six turntables, fourteen feet diameter, $3,780.
Six line track, &c., $5,050, no depreciation.
Four line coke track, &c., $1,350, no depreciation.
Two coke dumping inclines, $1,500.
Two 7 horse power single cylinder engines, $450.
Nine self-dumping coke cars, $1,125.
Two coke dumping inclines, $2,070.
Two drums and hoisting arrangement, &c., $380.
Two-inch pipe quenching arrangement, $50.

1428 On all items from six turntables to 2-inch pipes inclusive, 5 per cent. depreciation, making a total for such items, without depreciation, $15,755, and with depreciation, $14,967.

Retort house annex, contents, $16,370, without depreciation, $15,880, with depreciation.
Coke passage, $8,075 without, $8,059 with.
Gas engine house, total, $3,666 without, $3,597 with.
Coal hopper, contents, $3,315 without, $3,249 with.

By Mr. MATHEWSON:

Q. That refers to each of the buildings where you simply mentioned the building without defining the contents?
A. Yes, sir.
Coal shed, $6,250 without, $6,064 with.

By Mr. KIRBY:

Q. That includes the item under addenda to the coal shed, does it not?
A. Yes, No. 3.
Rigger house, $565, no depreciation.
Coal and coke storage, 30,000 tons of coal not included in valuation.
Coal handling apparatus, cable, buckets, &c., included in coke passage.

Boiler and engine house:

One 55 horse power vertical boiler, $734 without depreciation, $713 with.
One 50 horse power two-cylinder, 12 by 20, $1,000 without depreciation, $970 with.
One 25-foot sheet iron stack, $75 without, $73 with.
One small feed water pump, $55 without, $54 with.
Boiler house and well, $350 without, $341 with.

1429 By Mr. MATHEWSON:

Q. Did you add tools to that boiler house?
A. One vertical boiler?
Q. And tools for the boiler? What does that mean?
A. That is tubes, not tools. Two 66-inch diameter——
Q. Thirteen horse power boiler with tools?

A. Thirteen horse power boiler and tools for boiler.
Q. That is what I said.
A. Yes. $350 without, $341 with.
Well house, $1,042, no depreciation.

By Mr. MATHEWSON:

Q. Including addendum, item No. 4?
A. Yes, sir, No. 4.
Boiler house, one boiler 4 foot diameter, 10 feet 3 inches long, without depreciation, $607, less depreciation, $589.
Eighteen-inch sheet iron stack, $38, without depreciation, $37 with depreciation.
One clock, $15.
Pressure gauge, $8.
Valve house, $80, no depreciation.
New York safety, 14 by 60, engine, $1,980, no depreciation.
One Mackenzie exhauster, $3,050, no depreciation.
One King's pressure gauge, $35, no depreciation.
Thirty-inch valve stands, $525, no depreciation.
Photometer, $650, no depreciation.
Ten one-half Root exhauster, additional, $1,600, no depreciation.
Boiler house, two 50 horse power corrugated flue boilers, $2,860, without depreciation, $2,720 with depreciation.
Two stacks, $234, no depreciation.
Yard total, $2,804, without depreciation, $2,636 with depreciation.

1430 By Mr. KIRBY:

Q. In the yard there is an ammonia tank which you value at $1,008, is there not?
A. Yes, sir.
Q. Is there any depreciation on that item?
A. Six per cent.
Coke office, $185, no depreciation.
Boiler house, total, $2,029 without depreciation, $1,970 with depreciation.
Q. This includes the items in addenda item 6, does it not?
A. It does.
In the boiler house is one 50 horse power engine valued at $1,000, 2 per cent. depreciation.
Q. Giving a depreciated value at $980?
A. That is right.
Q. Clay mill and storage; $480 without depreciation; $460 with depreciation.
Storage sheds; 78 tons fire clay omitted from valuation as per item No. 7 in addenda.

By Mr. PAGE:

Q. Was that included in the total valuation that you gave?
A. No, sir; taken out.
Stable and yard, $455; no depreciation.

POOR COPY

Pump house, $240 without depreciation; $235 with depreciation.
Storage shed, scrap iron, $600.
Q. Why do you include the 50 tons of scrap iron?
A. That should come out.
Q. Your total figures ought to be reduced by $600?
A. By $600, yes, sir.
Storage shed, $415; no depreciation.
Weight office, $395; no depreciation. I think that covers it all.
Q. Now you have how many holders in that plant at 14th Street?
A. There are 6 holders of 345,500 cubic feet capacity each, and 2 holders of 250,000 cubic feet capacity each.
1431 Q. Take the 6 holders. What do you value the tanks at, including guide plates and inlets?
A. $219,039.
Q. Do you know when the tanks were constructed and erected?
A. No, I do not.
Q. Is that given with or without depreciation?
A. There is no depreciation.
Q. Did you include in that value the retaining walls?
A. Yes, sir.
Q. And what did you value the holders and frames of the six gas holders at?
A. $178,885.
Q. Is there any depreciation there?
A. 15 per cent., making a total value of $152,052.
Q. Can you state whether or not those were the holders that were on this property in 1884?
A. I cannot.
Q. Of the two additional holders that you have given of the smaller capacity, the two at 250,000 cubic feet capacity each, will you give us the valuation for the tank and for the holder and for the frames?
A. The value of the tank is $57,383, no depreciation. The value of the holders is $52,091, less 10 per cent., making a value of $46,-082.
Q. Those two holders are separated from the others, aren't they?
A. Yes, sir.
Q. That is the six are on the block bounded by 14th and 15th Streets, Avenues B and C?
A. Yes, sir.
Q. And the two are on the block bounded by 17th and 18th Streets and Avenues B and C?
A. Yes, sir.
Q. Do you know whether the capacity of those plants has been increased since 1884?
A. No, I do not.
Q. Now all of these holders are in brick tanks, aren't they?
A. Yes, sir.
Q. How did you arrive at the value of the brick walls around the

property? I don't mean the holders, I mean the walls around
1432 the yard?

A. The tank itself?

Q. No, no. You said there were some brick walls that were built around the yard?

A. Yes.

Q. That is what I refer to.

A. They were figured in detail; so many bricks.

Q. How deep below the surface does the foundation of the wall go?

A. Four feet.

Q. Is this foundation of brick?

A. Are you referring to the tank wall?

Q. No, the wall around the yard, what is practically the fence.

Mr. MATHEWSON: Is this the wall around the holder inclosure?

Mr. PAGE: No, whatever it is. He has got several brick walls.

Mr. MATHEWSON: Yes, I know, but I am trying to find out which——

Mr. PAGE: It is on page 1352.

A. That is the first item of holder value.

Q. How did you arrive at the value?

A. It was estimated in detail: 736,000 bricks, 536 cubic feet of bluestone and 1,000 cubic yards of excavation.

Q. The excavation was for four feet in depth?

A. Foundation, yes, sir.

Q. And the twelve feet in height included foundation, did it?

A. It is above the grade, the four feet is below grade.

Q. Sixteen feet altogether?

A. Yes, sir; that is the foundation.

Q. How wide is that wall?

A. Twelve inches thick.

Q. You said there were 20-inch pilasters. What is the distance between pilasters?

A. I don't know what the distance is, but there are twenty-five pilasters altogether.

1433 Q. Does that mean twenty inches in width?

A. Twenty inches in width and four inches projection from the surface of the brick wall.

By Mr. MATHEWSON:

Q. On each side of the wall, isn't it?

A. On one side.

By Mr. PAGE:

Q. Then the wall under pilaster would be sixteen inches wide?

A. That is right.

Q. And would extend twenty inches?

A. Yes, sir, twenty inches in width.

POOR COPY

Q. All of these gas holders that you have testified to are brick tanks?

A. Yes, sir.

Q. If you were building them to-day would you build them of brick or steel tanks?

A. That would depend upon the character of the ground.

Q. Well, at this particular place, I mean?

A. At this particular place I would only build them of brick.

Q. Which is the cheaper construction, brick or steel tank?

A. In this instance?

Q. I am referring to the original construction, whether it costs more to build a brick tank or a steel tank?

A. Well, a steel tank of the same dimensions is cheaper than a brick tank.

Q. Now, we will turn to the 42d Street station. This is also a coal gas plant, is it not?

A. Yes, sir.

Q. And of what capacity?

A. 4,500,000 cubic feet in twenty-four hours.

Q. On your direct-examination you gave the dimensions of the various buildings and then gave the total valuation of all the buildings, but you did not give the value you place upon each building.

A. No.

Q. Have you them separated?

A. Yes.

Q. Will you give that? I don't mean to segregate them,
1434 but the total for each building with and without depreciation.

A. Valve house and vault in the yard, $1,862; no depreciation.

Q. Do you know when that was built?

A. 1863.

The WITNESS: Do you want all these items?

Q. No. You need not separate the items.

A. Vault, $2,499; no depreciation.

Meter house, $958 without depreciation; $910 with depreciation.

Q. When was that built?

A. 1863.

Purifying house $63,439 without depreciation; $57,076 with depreciation. The first figure should be $72,250; without depreciation, and $65,006 with depreciation.

Q. What is the item of $8,811 which you have added?

A. That is under addenda item No. 2. That is for additional cost of the vault. It is explained in the addenda, item No. 2.

Q. Was that a part of the original construction in 1863?

A. Yes, sir, it was omitted from the first item by not allowing anything for planking, pumping and sheet piling.

Extension to main building, same house, purifier house, $3,877 without depreciation; $3,490 with depreciation.

Q. Do you know when the extension was built?

A. I presume it was built at the same time that the main house was built.

Q. That was in 1863?

A. Yes, sir.

Engine and meter house $17,476 without depreciation; $16,639 with depreciation.

Vaults, $7,125; no depreciation.

Toilet, $90 without depreciation; $81 with depreciation.

Retort house, $132,997 without depreciation; $126,348 with depreciation.

Q. What is the additional item which you have added?

A. Additional cost for bench foundations and the same
1435 items, planking, capping, pumping and sheet piling.

The next is condenser and scrubber house $13,520 without depreciation; $12,844 with depreciation.

Q. That was also built in 1863?

A. 1863, yes, sir.

Retort house- Nos. 2 and 3 $82,774 without depreciation and $78,636 with depreciation.

Vault for the same building, $12,834, no depreciation.

Exhauster engine and scrubber house, $29,643 without depreciation; $28,161 with depreciation.

Retort house No. 4 $11,216 without depreciation; $10,656 with depreciation.

Q. That building was built in 1863?

A. In 1863.

Q. And a depreciation of five per cent.?

A. Five per cent.

Vault south of No. 1 retort house and north of Nos. 2 and 3 retort houses, $45,229 without depreciation; with depreciation; $45,229, no depreciation, in other words.

Q. No depreciation on that?

A. No depreciation on that, no.

Q. Which vault is this?

A. This is the vault south of No. 1 retort house and north of Nos. 2 and 3 vault between purifier house and exhauster engine and scrubber house, $4,633. No depreciation.

Shed, $1,008 without depreciation and $807 with depreciation.

Coal shed No. 1 without depreciation, $54,055. No depreciation.

Q. This shed was built when?

A. 1887.

Q. All the buildings which you have given up to this time were built in 1863, is that right?

A. I believe they were, up to this time, yes, sir.

Q. Proceed.

A. —.

One coal shed with runway overhead, $1,000. No depreciation.

1436 Q. That was built in 1887?

A. 1887, yes, sir.

No. 2 coal shed, $71,531. No depreciation on that.

Q. And built in 1887?

POOR COPY

A. And built in 1887.

Carpenter shop, $156. No depreciation.

Q. That was built in 1887?

A. Yes, sir.

Brick fence on 11th Avenue, $4,643. No depreciation.

Q. That was built in 1863?

A. 1863.

Brick fence on 42nd Street, $5,267. No depreciation.

Q. Built in 1863?

A. In 1863.

Main building, stable and wagon shed, $24,579 without depreciation, $23,350 with depreciation.

East extension of above shed, $1,680 without depreciation, $1,596 with depreciation.

Another extension to above, $2,136 without depreciation, $2,029 with depreciation.

Q. Those were all built in 1863?

A. All built in 1863.

Building used for storing of hay, straw, &c., $3,715 without depreciation, $3,530 with depreciation.

Harness house, $1,965 without depreciation, $1,867 with depreciation.

Coke storage, weigh office, $492 without depreciation, $467 with depreciation.

Q. Both of those buildings last mentioned were built in 1863?

A. Yes, 1863.

Iron bridge crossing Twelfth Avenue, $3,050, no depreciation.

Q. When was that built?

A. 1886.

Q. Proceed.

A. Now I have to skip over to the addenda. These are buildings which are not contained on the original list.

Q. They have been given on your direct testimony, haven't they?

A. Yes, they are all shown here in the addenda.

1437 By Mr. KIRBY:

Q. Frame building for deodorizing purposes?

A. Yes, sir, frame building for deodorizing purposes, $890 without depreciation, $801 with depreciation.

Q. Have you got when that building was put up?

A. No, I have not got that. Cribbing and earth filling for eight oil tanks, eight feet diameter by 25 feet long, $2,438, no depreciation.

Frame pump house on pier, $320 without depreciation, $288 with depreciation.

Timber ash dump, $2,500, no depreciation.

Timber retaining fence around coal storage, $2,800 without depreciation, $2,520 with depreciation.

Q. That is the 700-foot fence you mentioned yesterday?

A. Yes, sir, 700-foot fence. That is in the addenda. That is all for the buildings.

Q. You failed yesterday to give the dimensions of the vault. Can you give us that now?

A. That is a very long description for each of the vaults. There is one vault under the octagonal brick building. The vault is 17 feet by 18 feet with 12-inch brick walls and foundation of piles, piles cut off 12 feet below grade line. Do you want a complete description of it?

Q. Yes.

A. Roof of vault, iron beams with brick arches. Vault eight feet high inside. Floors concrete 12 inches thick. Three air shafts from vault four by five by five feet high. One iron stairway from vault to yard. You only want the descriptions referring to the vaults themselves, do you?

Q. Yes.

A. That is all for the one vault.

Q. That vault you have appraised at how much?

A. $2,499.

Vault for engine and meter house. 20 by 38 by 9 feet, 16-inch walls on pile foundation, areaway on east side of vault, 4 feet wide, 10 feet high, 16-inch brick walls, coped with bluestone, and
1438 covered with wrought-iron grating.

Mr. MATHEWSON: Are those vaults?

The WITNESS: Vaults.

Mr. KIRBY: He has valued the vaults and areaway together.

Q. At how much?

A. Well, there are some more vaults come into that additional.

Q. Add them altogether.

A. No, that is all. $7,125.

Vault on south side of No. 2 and No. 3 retort house, 150 feet by 15 feet; vault, roof watertight, brick walls 20 inches thick on pile foundation, floor flagged, 11 feet 6 inches below sidewalk, roof 12-inch I-beams, 6 feet centre to centre 16 feet long, filled with brick and concrete arches, $12,834.

Vault south of No. 1 retort house and north of No. 2 and No. 3 retort house, floor flagged, roof formed of iron beams with brick and concrete arches, covered with flagstones, 3 inches thick, perfectly watertight, five vault lights 3 feet by 5 feet, with cast-iron frames and glass, adjustable hatches and wrought-iron pipe railing.

Q. This vault you valued at how much?

A. $45,229.

Vault between retort house and exhauster engine and scrubber house, 137 feet by 9 feet; same heights as vault on south and north side of Nos. 1 and 2 and 3 retort houses; side walls are walls of adjoining buildings; no partition walls; no adjustable hatches, $4,633. I believe that is all for the vaults.

By Mr. PAGE:

Q. That completes the buildings?

POOR COPY

A. That completes the buildings and the vaults.

1439 Q. In estimating the values of the buildings which you have given did you resort to the estimate as in ascertaining the value of the 14th Street buildings?

A. I did, sir.

Q. That is, you took those buildings of the Brooklyn Company that you spoke of as the standard?

A. In comparison, yes, sir.

Q. And when you had completed your estimate of the value of the buildings, you added 10 per cent. interest to the value, did you?

A. Yes, sir.

Q. And what was that for?

A. For the same item as in the instance of the 14th Street plant, for general engineering, draining, sewering, &c.

Q. What do you mean by general engineering?

A. Engineering for the entire plant as such, but not for the individual buildings, the laying out of the entire plant.

Q. Is there any established rates that engineers charge for such services in laying out a plant and supervising its construction?

A. I do not know that there is; I do not know that there is any established rate. That item was explained yesterday, what it contained. It contained all sorts of articles that I did not find in my examination, water in holder tanks, general engineering, the drawings, gradings, curbings, sewering and other items of that kind. I forget just what that was yesterday. I gave it all in detail.

Q. If you were building a plant and had gotten in your estimates or bids from all the different contractors, you would then add this item of 10 per cent.?

A. I would, sir.

Q. Raise the amount of your bid to 10 per cent.?

A. Yes, sir.

Q. To cover such matters?

A. Yes.

Q. Is that for your services as engineer or is it to cover such contingencies as might arise in the course of construction?

1440 A. Both; it would cover everything.

Q. While you were chief engineer of Bartlett, Hayward & Company, did you add to your bids that you put in this item of 10 per cent.?

A. We did not make any contract for the entire plant in Astoria, This refers to an entire plant.

Q. I did not say Astoria particularly. I say, while you were preparing your bids, while you were connected with the firm of Bartlett, Hayward & Company, did you add this item of 10 per cent.?

A. Sometimes 10 per cent., sometimes 15, depending on the kind and character of the plant.

Q. And sometimes nothing?

A. No, never nothing.

Q. I understand that you estimated on this plant, as far as the buildings are concerned, the price that it would cost to build the buildings to-day?

A. Yes.

Q. And the depreciation which you have figured in each instance is the depreciation that the buildings in their present condition show, from a building recently completed?

A. Yes, sir.

Q. You did not figure what it would cost to put up these buildings in 1863?

A. I did not.

Q. And then figure how much they had depreciated from that cost?

A. I did not.

Q. Now, you added also another item of five per cent. What was that?

A. I think I explained that yesterday, that it is interest charges.

Q. Well, explain it again if you did.

A. It is for interest charges, for the construction of the plant; it takes about two years—not less than two years—to construct a plant of this size and we add interest on the total expenditures for one year.

Q. And you believe, in the cost of construction, that interest on the money invested should be added as a part of the cost of construction?

A. I do.

1441 Q. And should not be afterwards carried into the price or cost of manufacturing gas?

Mr. MATHEWSON: Is not that a conclusion which the witness has not testified respecting?

Mr. PAGE: I will withdraw that.

Q. Would that five per cent. be included in your estimate, or would it afterwards be charged up by the company against the cost of the plant?

A. No, by the company.

Q. And it would not be included in the estimate which you made?

A. No, sir.

Q. Did you also add the ten per cent. and the five per cent. to the cost of the apparatus, as well as to the cost of the buildings?

A. Yes, sir.

At 5.20 o'clock P. M. adjourned to to-morrow, Thursday, August 30th, at 11 o'clock A. M.

Last Exhibits:

Complainant's 233.
State's N.
City's 34.

1442 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John A. Shields, Clerk of the Circuit Court of the United States of America, for the Southern District of New York, in the Second Circuit, do hereby Certify that the foregoing (Vol. 2) pages, numbered from 719 to 1441 inclusive, contain a true and complete transcript of the record and proceedings had in said Court, in the cause entitled Consolidated Gas Company, Complainant, Appellee, against Julius M. Mayer, as Attorney General, *et al.*, Defendants-Appellants, as the same remain of record and on file in my office. (Vol. 2.)

In Testimony Whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, in the Second Circuit, this 15th day of May, in the year of our Lord One Thousand Nine Hundred and eight and of the Independence of the said United States the One Hundred and thirty-second.

[Seal of U. S. Circuit Court, South Dist. New York.]

JNO. A. SHIELDS, *Clerk.*

[Endorsed:] United States Circuit Court of Appeals for the Second Circuit. —— —— *vs.* —— ——. Transcript of Record from the Circuit Court of the United States for the Southern District of New York.

1443 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY, OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, THURSDAY, *August* 30, 1906—11.00 a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Meade, Mr. Page, Mr. Burr, Mr. Kirby.

U. S. Circuit Court, Southern District N. Y. Filed Jun- 24, 1907. John A. Shields, Clerk.

1444 FREDERICK J. MAYER, being further examined, testified as follows:

Cross-examination by Mr. PAGE (continued):

Q. I understand you desire to make some corrections in your testimony?

A. Yes, with regard to the 14th Street plant.

Q. Is it in the building or the apparatus?

A. In the apparatus. In transferring the figures from my original notes some decimal points were changed round in some instances.

Q. In the direct or cross-examination?

A. In the cross-examination.

By Mr. MATHEWSON:

Q. In the direct also?

A. Yes, in the totals, too.

Q. I did not ask as to individual items. Correction in those items would change the totals, of course.

A. Yes, I have them here; page 1431, in the instance of the brick tanks, for the two 250,000 cubic feet holders I gave the price yesterday as $573,838. It should have been $57,383. That is just misplacing a decimal point in transferring the figures. In the instance of apparatus contained in the engine room I gave the price for a jet photometer $650. It should be $65.00; and there should be also one additional photometer instead of two, making two items of $65 instead of one.

Q. Do you mean two items of $65 each, or two together of $65?

A. Two jet photometers at $65.

POOR COPY

Q. That is $130 instead of $650?
A. Yes, sir.

The MASTER: That is on page 1424.

A. In the instance of contents of meter house I gave the
1445 price of two 16 by 13 meters as $1,600. This value should be $13,540.

The MASTER: That would seem to be at the bottom of page 1422. Two 16-feet diameter station meters. Is that the item?

The WITNESS: Yes. $13,540 for the two.

By Mr. PAGE:

Q. Here is another photometer here?
A. That is a Bar photometer. I was working up to the minute I began to give my testimony, and it is possible that there may be some other figures that I have not discovered.

By Mr. MATHEWSON:

Q. When you come to make a more careful comparison?
A. Yes, sir.

By Mr. PAGE:

Q. Turn to page 1429; there is another photometer there, right after where you give the item addendum No. 4. That price is right. That is a Bar photometer.

By Mr. MATHEWSON:

Q. That first item on page 1431, about the middle of the page, where it should be $57,383 instead of $573,838, that was the value of the two together, was it not?
A. Yes, two tanks.

By Mr. PAGE:

Q. Is that all?
A. Yes. Do you want the corresponding corrections for the totals?

Mr. MATHEWSON: Yes, give the totals.

1446 A. Total value of the 14th Street plant, including the above corrections, is $2,549,545, instead of $3,132,860.

Q. And the total valuation of all the plants will be correspondingly changed, of course?
A. I can give it to you if you want it.
Q. Yes, we might as well have it.
A. That would be without the 18th Street works, $15,532,489, instead of $16,098,893.
Q. And the total, including the 18th Street Works?
A. $17,040,524.
Q. In place of what?
A. In place of $17,606,928.
Q. In the description of apparatus which you have furnished us you begin with the valve house?

A. Yes, sir.

Q. Will you state what apparatus is contained in the valve house?

A. One 6-foot diameter by 2-foot-6 high governor; one cast iron manifold in conjunction with governor; in reality a combined governor and center valve; five floor stands or standards for valves.

Q. Do you value that as an entirety or in separate items?

A. Why, it is figured in detail, but the valuation is not entirely based on so many cents per pound as to what they weigh. This whole apparatus is in connection with each other. The combination forms really one apparatus.

Q. You take the weight then of an apparatus and multiply it by some figure?

A. By a unit price per pound.

Q. What is that unit price?

A. In this instance it is 5.6 cents.

Q. What do you get as the total cost at that rate?

A. $1497.

Q. And that is without depreciation?

A. Yes, sir.

Q. What depreciation do you figure?

A. $1198, equal to twenty per cent. deduction.

1447 Q. In estimating the value of the machine by weight you do not take into consideration its physical condition or efficiency, do you. In other words, a machine that is broken down and is all out of condition, will weigh just as much as a machine that is in thorough repair and operating at a high degree of efficiency, wouldn't it?

A. Yes, sir.

Q. On the market do you buy gas machinery by weight per pound?

A. Well, I have manufactured gas machinery and based my estimate on the pound price. All estimates are made that way.

Q. If you were going out into the market to buy a governor would you ask them at how much they would sell a governor per pound?

A. No, sir.

Q. There is a market price for these things, isn't there?

A. Yes, sir.

Q. And that market price is not arrived at by multiplying the weight by a price per pound?

A. No, sir; that is only in the instance of the governor; that does not refer to other things.

Q. No, we are talking about governors now. This machinery was placed in this valve house in 1863, wasn't it?

A. 1863, yes, sir.

Q. And has probably been in operation ever since?

A. Yes, sir.

Q. The price that you have given, $1198, that would be for a governor bought to-day, wouldn't it?

A. No, sir; that same governor bought to-day would be $1,497.

Q. Well, would $1497 be the price you would pay for that same governor new with the connections and fittings that you have specified here?

POOR COPY

A. Yes, sir. That would be an exceedingly low price for it.
Q. Whose manufacture is this particular governor, do you know?
A. Morris & Tasker.
Q. Are they still in business?
A. No, sir.
Q. How long since they went out of business?
A. Oh, I think all of 12 or 15 years.

1448 Q. Now we will pass on the purifier house. Will you state how many purifier boxes there are and give a description of them?

A. There are 8 boxes 20 feet by 22 feet by 3 feet deep inside and 24 inches deep by 4 inches wide cups; two layers of trays; 8 wrought iron covers and the necessary supports.
Q. Did you value those separately or did you value them with the covers?
A. With the covers and supports complete.
Q. Will you state what the size of the covers is?
A. 20 feet by 22 feet. Well, they are for those boxes—they are about 20 feet 3 inches by 22 feet 3 inches by 3 feet 6 inches deep on the sides.
Q. And the method of estimating the purifier apparatus, did you arrive at that by taking the weight?
A. I did.
Q. And multiplying it by 5.6 cents, the same unit as you used before?
A. Yes, sir.
Q. And proceeding in that manner what was your result?
A. $37,840 without depreciation and $35,948 with depreciation.
Q. Do you know when this apparatus was put into the purifying house?
A. 1863.
Q. And you figure that in that length of time it has depreciated 5 per cent.
A. Yes, sir. There is practically no depreciation except on the sides of the covers. The purifiers are as good to-day as ever.
Q. As you explained in regard to the 14th Street property, that was taken care of by repairs?
A. Yes, sir.
Q. Is the purifying apparatus sold by weight?
A. It costs by weight.
Q. I*n* am speaking about when a man buys it. Of course any manufacturer makes his estimate on the weight very largely.
A. It is sold by a lump sum; a contract price.

1449 Q. And you have not stated the price here for purifying apparatus that you have obtained by asking estimates from various manufacturers of that apparatus?

A. I have not. It is my own estimte.
Q. It is your own estimate, based on that rate per pound?
A. Yes, sir. Estimated in detail, each factor in detail to make up that 5.6 cents per pound.

Q. And the apparatus was not weighed by you, but the weights were estimated?

A. The weights were estimated.

Q. So to arrive at the value of this particular plant you estimated the weight, estimated the unit, and multiplied the two together to produce a result?

A. Yes, sir.

Q. Now proceed with the next item?

A. Four additional purifiers, 16 feet by 27 feet by 3 feet 6 inches deep, with 24 inch by 4 inch cups, together with supports and covers and trays.

Q. And did you also take into consideration, in giving an estimate, the covers?

A. Yes, sir; I mentioned the covers.

Q. Oh, did you? Excuse me. And in estimating the weight of that apparatus and multiplying it by 5.6 cents as before, what result did you produce?

A. $18,576 without depreciation, and $17,648 with depreciation.

Q. Do you know whether these purifiers have been in use since 1868 or not?

A. I do not.

Q. You do not know how long those have been in use?

A. No, sir; I do not.

Q. What else have you?

A. Four small purifiers, 7 feet 6 inches by 10 feet 6 inches by 3 feet deep, with covers and supports, valued at $3,308 without depreciation, and $3,142 with depreciation.

Q. The result being arrived at in the same way that you stated before?

A. The same method, yes, sir.

Q. What is the capacity of this purifying apparatus?

1450 A. The total of all the purifiers is equal to the capacity of the plant.

Q. How do you arrive at that?

A. In proportion to the number of benches and other apparatus in the entire plant making up the total capacity of the plant. If such was not the case they could not purify the gas. We know the gas is purified.

Q. Is there more of a purifying capacity here than the total capacity of the plant?

A. That may be the case; I have not figured it in detail. There certainly is not less than the capacity of the plant.

Q. You have some small items, haven't you?

A. Not in the purifying house. Oh, yes, there is another purifying house:

Two hydraulic floor carriages, that is for the 20 foot by 22 foot purifiers, $1,400;

One hand power floor carriage for the 16 by 27 purifiers, $523.

One hand power floor carriage for the 7 foot 6 inch by 10 foot 6 inch boxes, $280.

Oxide barrows, tools, etc., not valued, included in the final 10 per cent. All these prices I am giving are always without the 10 per

POOR COPY

cent. and the 5 per cent interest charges, of course. Those would have to be added in each instance given to the totals.

Q. I understand; you do that when you get through?

A. Yes, sir.

Q. And those hand barrows and hydraulic floor carriages were all estimated in the same way that the balance of the purifying apparatus was?

A. Yes, sir.

Q. The same unit was used?

A. Yes, sir.

Q. Now proceed.

A. These units are based upon the actual cost figures, of which I have intimate knowledge.

Q. Proceed.

A. The next is the engine and meter house. The first is item No. 13 of the addenda in this house:

1451 One 48 by 48 McKenzie exhauster, with 12 inch by 24 inch horizontal engines; one Huntoon governor, complete, $3,400 without depreciation; $3,230 with depreciation.

Q. Do you know when that engine was put in the property?

A. No, sir, I do not; but it is in a thoroughly good condition. It is working every day.

Q. How did you arrive at this value that you gave? Do you weigh the engine and multiply it by some figure?

A. No, sir, I took the prices of the engines and the exhausters from the manufacturers.

Q. Is that the list price that you put in?

A. That is the price delivered and erected.

Q. Proceed.

A. One 13 foot 6 inch cast iron station meter, valued, without depreciation, at $5,800; one 11 foot 6 inch meter valued at $4,800, and one 10 foot 6 inch meter valued at $3,800. The total sum for the three meters, including depreciation, is $10,875.

By Mr. MATHEWSON:

Q. Is that total right?

A. With depreciation for the three meters.

Q. How much depreciation?

A. 25 per cent. In this instance it is due to the old style drums contained in these meters, instead of the new style.

By Mr. PAGE:

Q. These meters were put in at what time?

A. 1882 and 1888.

Q. What is the depreciation item for? Is it for a reduced efficiency of the meter?

A. On account of the old style drums; old drums instead of new drums that are being built now. I think it is a question of a very few years when these drums will have to be replaced with new drums.

Q. Therefore, in allowing the value here you allowed for
1452 the replacing of the drums?

A. Yes, sir, twenty-five per cent. of the total cost.

Q. Now, proceed with the contents of the engine meter house.

A. There is one additional meter in another small meter house located alongside of the holders which is not included in the contents of this meter house and I have added under the addenda, item No. 13½, an 8 foot by 8 foot station meter; $3,000 without depreciation; $2700 with depreciation. That is item No. 13½.

Q. Now, we come to the retort house.

A. 60 benches of 6's and three stacks; total value without depreciation, $180,000; with depreciation, $171,000. To this must be added the item in addenda, No. 15, on account of the deep furnace and the new settings there must be added to each bench $500, I think it is.

Mr. MATHEWSON: Yes, item No. 15.

The WITNESS (Continuing): $500 for each bench.

Q. That would make then for the sixty benches, thirty thousand dollars?

A. Yes, sir, additional thirty thousand dollars for the sixty benches without depreciation, and $28,500 with depreciation.

Q. That makes the value of the benches without depreciation $210,000?

A. Yes, sir.

Q. Without depreciation?

A. Yes, sir.

Q. And with depreciation how much?

A. $199,500.

Q. The size of these retorts was given as 14 inches by 24?

A. Yes, sir.

Q. And the setting 9 feet deep; what does that mean?

A. That is the depth of the regenerator furnace from the floor line.

Q. What is the length of the retort?

A. That means the length of the retorts. Nine feet deep means the length inside the arch.

1453 Q. What do you mean by regenerative type, 60 benches of 6's and 6 blocks of regenerative type?

A. That refers to the style of furnace applied under the benches, which in this instance is of great depth, I think it is 9 or 10 feet and contains recuperative flues to heat the secondary air required for the combustion in the benches.

Q. That increases, d n't it, the efficiency of the retort very much?

A. Yes, sir.

Q. And by having the recuperative flues——

A. I beg pardon, not the efficiency of the retort, but the fuel consumption.

Q. Well, what I mean by that, for a less amount of fuel you can carbonize a greater amount of coal?

A. Yes, sir.

POOR COPY

Mr. MATHEWSON: With the same amount of fuel you can carbonize a greater amount of coal.

Mr. PAGE: Well, either would be correct.

Mr. MATHEWSON: You might within certain limits.

Q. As comparing this particular retort house with the retort house at 14th Street, how much more efficient are these retorts than those at 14th Street?

A. In 14th Street I think there are some one-fourth depth benches, some half depth benches and these are full depth benches. Of the three, these would give the best results, as far as fuel consumption is concerned.

Q. That is an important item in the manufacture of gas, isn't it?

A. Yes, sir.

Q. What condition are these benches in?

A. Perfect condition.

Q. Do you know when they were put in?

A. The arches, in 1863; they had been rebuilt since that
1454 time; and the settings have been renewed many times.

Q. When were they rebuilt?

A. The settings, approximately every three years.

Q. I know that, but you said that the arches had been rebuilt or the apparatus had been rebuilt since then?

A. I have not got the date of rebuilding the arches; they were rebuilt at several times.

Q. You do not refer to the entire apparatus when you say it has been rebuilt; you refer to this refilling, is that what you mean?

A. I refer to the refilling and rebuilding of the arches.

Q. The refilling is taken care of as an ordinary repair made necessary by wear and tear?

A. Yes, sir.

Q. How about the rebuilding of the arches, is that the same?

A. No, that probably does not occur but once in perhaps 20 years, 25 years in some instances.

Q. But this apparatus is in perfect condition to-day, you say?

A. Yes, sir.

Q. And do you allow something for depreciation?

A. 5 per cent.

Q. Well, why, if the apparatus is in perfect condition?

A. Because the arches are older in proportion to what the settings are. The settings are being reset now, a part of it is entirely new, already in operation and the balance is being rest at the present time.

Q. I notice the retorts here are 14 inches by 24 inches, while the retorts, or a large number of them, at 14th Street are 12 inches by 21 inches.

A. Yes, sir.

Q. Is this a better retort, 14 inches by 24 inches—will it produce better results than a 12 inch by 21 inch retort?

A. No, sir, the results are the same.

Q. Well, the results are gas, of course; but I mean can
1455 you produce gas cheaper in a retort of this size than you can in the other?

A. No. The charges of coal in smaller retorts are less than those in the larger, and the fuel consumption is correspondingly less, so there is no difference.

Q. Well, to produce the same number of thousand cubic feet of gas you have to charge a small retort more frequently—that is, more times—to produce the same number of thousand cubic feet, than in the other?

A. In an indirect way you do. You do not charge the same retort oftener, but you have more retorts, and with the large retorts you produce the same amount of gas; in other words, you charge more retorts in the same space of time, but not oftener.

Q. It takes just as long firing to carbonize in a large retort as it does in a small retort?

A. Yes.

Q. Now proceed with the condenser and scrubber house.

A. Condenser and scrubber house:

Two cast iron scrubbers, 8 feet diameter, 18 feet height, $1,560, without depreciation, and $1,482 with depreciation.

Q. Is this each, or the value of both together?

A. That is only for one, and item No. 16 is the addenda; the item is explained that it should be doubled, therefore there are two scrubbers, each of the same amount.

Q. How did you arrive at the value you give on the main sheet of your paper that you are answering from of two scrubbers of 24,000 pounds, multiplied by 6.5 cents a pound.

A. 6.5 cents a pound forms a figure composed of the following units——

Q. No, I do not mean that; I say how do you get at your 24,000 pounds?

A. That is estimated from the size of the apparatus.

Q. That is the two scrubbers would weigh——

A. 48,000 pounds.

Q. Well, you had the two scrubbers before you when you
1456 made the estimate of 24,000 pounds; you knew there were two scrubbers.

A. The estimate is made on the basis of one scrubber, and in the schedule multiplied by the number of apparatus, and in this instance was overlooked, and the weight put down for one instead of two. That I did not find until after I went to the works after all my schedule was made, to make a final examination, and then I discovered that error and added it to the addenda.

Q. Then you knew there were the two scrubbers there?

A. Yes.

Q. Now proceed with the condenser.

A. Two scrubbers are in my original notes, but in transferring it on the schedule we transferred one instead of two.

Q. Those two scrubbers have been there since 1863, haven't they?

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A. Yes, sir. One wrought iron tubular condenser; value, without depreciation, $17,220, with depreciation, $16,359.

Q. Is that a water condenser?

A. Yes, sir.

Q. Do you know when that was erected?

A. 1863.

Q. How did you arrive at the value?

A. By multiplying the weight by the unit part of 8.4 cents per pound.

Q. Proceed.

A. One air condenser, without depreciation, $11,607, with depreciation, $11,027.

Q. Was that also estimated by weight?

A. It was.

Q. And what is the unit of weight there?

A. The unit of price, do you mean?

Q. Yes.

A. 7.3 cents a pound.

Q. Proceed.

A. One cast iron box 7 feet 6 inches by 5 feet 6 inches by 9 feet deep, $633; no depreciation.

Retort house Nos. 2 and 3.

Q. This box was an estimated weight at an estimated price, was it?

A. Yes, sir.

Q. What is your estimated price per pound?

A. 4.5 cents a pound.

1457 Q. Proceed.

A. Retort house Nos. 2 and 3, 6 benches of 6's, $18,000; 14 benches of 6's, $30,940, making a total for the above benches, $48,940, without depreciation; with depreciation, $46,493; 1 range of 20 benches of 7's, $65,000, without depreciation; $61,750 with depreciation.

Q. Building in benches of 7's is an improvement, isn't it, on building in benches of 6's?

A. Well, it depends upon the space you have at your disposal; I cannot call it exactly an improvement.

Q. Well, if you have a whole block to lay out your plant in—that is, I mean it produces better results and more economical results.

A. Yes, in the manner I have described before.

Q. And if you were building a plant to-day and had the room that they have in these 14th Street and 42d Street plants, you would probably put it up in benches of 7's.

A. If I would build the plant for the total capacity at once, I should; but if I should start the plant with probably one-half of the capacity as this was done, I should not.

Q. Yes, I am talking about the plant, if you should put it up to-day. You say then you would?

A. For the total capacity I should put in larger benches.

By Mr. MATHEWSON:

Q. Built at one time?
A. At one time.

By Mr. PAGE:

Q. How much larger?
A. For a plant of this size I should put in benches of 8's.
Q. Go on, Mr. Mayer.
A. There is one item in the addenda No. 17 which goes into this building $500 must be added to each bench for the same reason as given in retort house No. 1.

1458 By Mr. MATHEWSON:

Q. These are deep regenerative furnaces, aren't they, all these in this retort house?
A. Not all, no.
Mr. PAGE: 14 benches are direct fire.
Mr. MATHEWSON: All except the 14 benches?
The WITNESS: Yes, that adds $3,000 without depreciation and $2,850 with depreciation.
Q. To which item?
A. To the 6 benches, the deep regenerative furnaces, the first item in the schedule.

By Mr. PAGE:

Q. You add how much to each bench?
A. $500, $3,000 for the six.

By Mr. MATHEWSON:

Q. Nothing for the fourteen?
A. No, sir; they are direct fire.
Q. How about the twenty benches of sevens? They are deep regenerative furnaces?
A. There is no addition to those; they are figured at $3,250 per bench.

By Mr. PAGE:

Q. What else have you in this retort house?
A. Nothing else in this retort house. The next is the Exhauster and engine house.
Q. Proceed.
A. One 8 by 8-inch Greenfield Engine, $1,625 without depreciation, $1,219 with depreciation; two large Mackenzie exhausters, $3,400 without depreciation, $2,550 with depreciation; one 16-inch by 30-inch horizontal engine, $3,200 without depreciation, $2,400 with depreciation; one 8-inch by 8-inch Greenfield engine, $425 without depreciation, $319 with depreciation; one 8-foot by 16-foot washer, $6,860 without depreciation, $5,145 with de-
1459 preciation; one 10-inch by 10-inch Greenfield engine, $550 without depreciation, $413 with depreciation; one Eclipse washer, $5,488 without depreciation, and $4,116 with depreciation;

one tubular condenser, $4,900 without depreciation, $3,675 with depreciation.

Q. Give the number of tubes 42-6 by 5?

A. It contains 576 5-inch diameter cast iron tubes. My first depreciation on all that apparatus named for the exhauster and engine house was 25 per cent. But upon another examination, after the completion of the schedule, I found that the depreciation should only be 5 per cent., for the reason that all the apparatus is in perfect working condition; that makes an addition of $5,281 to the values of the apparatus in that house. I wish to state that these little differences occurred in going back and forth to the works, because I could not grasp all the thing at one time, and while my men were working taking measurements at the works I was working on my unit figures to apply to the cost, and I had to go back there, and found the condition to be different than what I had assumed at first.

Q. You have got some oil gas scrubbers in here?

A. In this building?

Q. Those you have in this schedule you have given me. Two oil gas scrubbers.

A. Two oil gas scrubbers. They were given at $436 for two, without depreciation, and $327 with depreciation. That should be corrected as per item 19 in addenda. There should be added $734 without depreciation, and $698 with depreciation.

Q. Is that to be added to the other?

A. That is to be added to the other; yes, sir.

Q. There is one scrubber valued at $436 and another scrubber valued at $734?

A. No, the scrubbers weighed 18,000 pounds instead of 6,703 pounds, making a difference of 11,297 pounds in the weight,
1460 which I discovered on remeasuring the apparatus.

A. And on a remeasurement and estimate of weight you found that you had made a mistake before, and then you multiplied this result by how much?

A. By 6.5 cents, the same price that was applied to the weight that was too small.

Q. Proceed now with the other oil gas condensers.

A. One cast iron oil gas condenser, without depreciation, $1,512; with depreciation, $1,134. These prices should be changed as per item No. 20 of the addenda, by adding $303 to the price, including depreciation.

Q. That is, that price should be $1,437 instead of $1,134?

A. $1,437.

Q. On a re-examination you found it was not depreciated as badly as you thought it had been?

A. No, sir; as I said before, I could not establish those facts until I went back and forth repeatedly to the various works during the time my men were taking the measurements, because it was impossible for me to grasp the condition of all the apparatus on the first examination, and I did not want to go back and make an entirely new schedule, as the time was too short, and I made these addenda.

Q. We have another retort house, No. 4.
A. Retort house No. 4, four benches of sixes.
Q. If you have any corrections to make, probably you had better make them now.
A. Right away?
Q. Yes, unless you prefer to give it the other way.
A. I can make the corrections. Value, without depreciation, $14,000, and with depreciation, $13,300, which includes the item No. 20½ referred to in the addenda.
Q. What do you mean by "entirely disconnected except arches?"
A. I found that all the settings had been torn out, and on my second visit I found that new settings had been delivered at the grounds and they were going to put them in; they were get-
1461 ting the arches ready for repairs. I thought at first they had been abandoned.
Q. Now, the values?
A. One small steam drip pump, $84; no depreciation. Two continental boilers, 60-H. P. I will give this and give the deductions afterwards. $12,000 without depreciation, $10,800 with depreciation.

By Mr. BURR:

Q. That is for both boilers?
A. For both boilers.
Breeching and steel stack, $475 without depreciation, $428 with depreciation; one Continental boiler, 105-H. P., $5,100 without depreciation, $4,590 with depreciation. Breeching and stack for same, $475 without depreciation, $428 with. Two small boiler feed pumps, $176 without depreciation, $158 with. One Knowles Air compressor, $700 without depreciation, $630 with depreciation.

By Mr. PAGE:

Q. Before we proceed, I notice that you value a 60-H. P. boiler at $6,000 and a 105-H. P. boiler at $5,100.
A. Yes. I say I correct that afterwards in the addenda.
Two feed water heaters, $600 without depreciation, $540 with.
One 8 x 8 Greenfield engine, $365 without, $324 with.
One vertical drill press, $100 without depreciation, $80 with.
One pipe cutter, $425 without depreciation, $340 with.
One bench lathe, $50 without depreciation, $40 with.

Mr. PAGE: Can he not lump those small items?
Mr. MATHEWSON: If you do not want the values of them
1462 why not let him say simply, bench lathe, grindstone, &c.?
Mr. PAGE: They are small items, I do not think we ought to waste time on them. Just state what they are.

A. Grindstone, two brick forges, two anvils, one sledge block, one hand shear, one hand punch, one bench, one portable forge, five 100-gallon oil tanks, one 50-gallon oil tank, blacksmith's tools, wooden benches, bench vises. Those latter items, the tools, come out, they are taken off of the ten per cent. addition to the end of the schedule. As I said before, 10 per cent. has been omitted from all

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those figures. There should be deducted from the total sum of the boilers $10,025, including depreciation.

Q. On this Continental 60-H. P. boiler, or the three?

A. On the total sum of the three boilers.

Q. Why did you make that deduction?

A. It was a mistake in the first calculation.

Q. What mistake was made in the first calculation?

A. The first two boilers should cost —without depreciation, instead of $12,000 without depreciation, and the third boiler should cost $2,730 instead of $5,100 without depreciation.

By Mr. MATHEWSON:

Q. How much with depreciation; did you figure that out?

A. I gave the total just now; with depreciation $5,265 for the three boilers.

By Mr. PAGE:

Q. Then you were right in your original assumption that a 105-H. P. boiler 7 by 12 would cost more than a 60-H. P. boiler 5 feet 6 inches by 12, were you? Deducting your $6,240 from $12,000 you get $5,760; divide that by two is $2,880 as the price of the
1463 60-H. P. boiler, while you give the price of a 105-H. P. boiler as $2,730. Is that right?

A. The price for the two boilers of 60-H. P. each should be $3,120 without depreciation, and the price for the one boiler 7 feet in diameter should be $2,730 without depreciation.

Q. Therefore instead of $12,000 as the value of those two boilers it should be $3,120.

A. Yes.

Q. How do you arrive at the value of those boilers?

A. Those prices I got from the Continental Iron Works.

Q. Proceed.

A. Carpenter shop, total contents, $1,500, which includes items in addenda No. 22.

Q. How much do you make it?

A. $1,500.

Q. Without depreciation?

A. Yes.

Q. And with depreciation how much?

A. $1,425 with depreciation.

Q. You can take the coke storage yard in the same way.

A. Coke storage yard, total value $1,510 without depreciation, $1,323 with depreciation. Tanks and scales, total value without depreciation $1,226, with depreciation $1187.

Q. How do you get the value of that?

A. I got that from the companies that furnished the scales.

Q. Do you take their list price?

A. No, I telephoned for a price for the scales to be delivered and erected in New York City.

Q. Proceed.

A. Water meters, $100; no depreciation. Coal in storage not in-

cluded in plant. Coal hoisting apparatus, total price of all machinery, $55,000 without, $52,250 with.

Q. Now, in adding this $20,000 to the original estimate of value, what is the reason for that? Why did you add it?

A. Because of a correction of the figures given by the people that furnished the apparatus. They gave me first $35,000 and omitted the grab bucket and the hoisting rigging at the dock, the
1464 hoisting engine, etc. In their first price they included only the railways and transporting machinery for the coal, but no hoisting machinery.

Oil in tar storage:

Two wrought iron tanks, 9 feet diameter, 30 feet long, $2,075 without depreciation, $1,868 with.

Eight wrought iron tanks, 8 feet diameter, 25 feet long, $6,014 without depreciation, $5,714 with.

One wrought iron tank, 30 feet diameter, 21 feet long, $3,302; no depreciation.

One wooden tank, 30 feet diameter, 15 feet 6 inches high, $540.

Piles under wooden tank, $650.

Wrought iron tanks, 5 feet diameter, 25 feet long, $437 without depreciation, $415 with.

One wooden well, 20 by 25 by 8 feet deep, $256 without depreciation, $230 with.

One wooden well, 20 by 20 by 8, $166 without depreciation, $150 with.

One wooden well, 18 feet 7 inches by 7 feet 6 inches by 8 feet, $437 without, $415 with.

Piles under wooden tanks, $576 without depreciation, $519 with.

The depreciation for piles in this instance is due to the fact that the piles are above the water line and show the least signs of decay right above the ground. If piles are above the water line I figure no depreciation. I make that explanation so that you will understand it when I say there is no depreciation on any foundations.

Q. Have you got the price of wrought iron tank, 12 by 12? Is that omitted?

A. Yes, it is omitted.

Now, under the total there is an item, $25, which adds to the price, with depreciation, $4,364, for lead lining in all of the wooden tanks, that I did not discover until a subsequent visit to the works.

Q. In arriving at the valuation that you have given for
1465 these wrought iron tanks, did you proceed as before, by weight?

A. Yes.

Q. And what unit of value did you take?

A. 6¾ cents per pound.

Here a recess was taken until 2:15 P. M.

After Recess.

By Mr. PAGE:

Q. Is there some correction you wish to make?

A. Yes, sir; I want to insert item No. 14 under the heading of

engine, meter house and office. The depreciation was changed from 25 per cent. to 5 per cent. under that item 14 on account of the meters having been provided with new drums in 1892 for the 13 foot 6 inch meter, and the drums which were placed in place in 1882 at that time were provided with new partitions.

By Mr. MATHEWSON:

Q. When you made the 25 per cent. estimate did you assume that the drums were the same as were put in when the meter was manufactured originally?

A. Yes, sir.

Q. And you found subsequently that that was not the case, but new drums had been substituted?

A. New drums had been supplied; yes, sir.

Q. What would that item be?

A. That adds an item, including depreciation, of $2,805.

Q. What would it be then, the value as you now figure it, including depreciation? Oh, those were the three engines under heading of meter, engine house and office?

A. Yes, sir. It would make a total item of $13,680, instead of $10,875.

1466 By Mr. PAGE:

Q. Is there anything else you wish to add?

A. Have I item No. 26 in the addenda?

Q. No, I don't think so.

A. I think the last we had was the lead lining for wooden tanks?

Q. Yes.

A. And there was one additional item, No. 26, in the addenda for one cast iron purifier, 30 feet by 20 feet by 3 feet deep, with wrought iron cover and hoisting crane, located in the deodorizer house; total value, $4,760 without depreciation; $3,332 with depreciation.

Q. Why do you take off a 30 per cent. depreciation there?

A. That was a purifier which was located on the dock, and is not in as good condition as were the rest of the purifiers used to purify for carbonic acid and sulphur. This purifier was erected, I understand, for the purpose of relieving the works of any smell, of which complaint was made by the Health Department, and has not been kept in as good condition as the rest of the plant?

Q. Is it used?

A. Yes, sir. It was not in a good condition. The sides are rusted, the cover tops are rusted.

By Mr. MATHEWSON:

Q. Let me ask you for clearness, whether all these items in the addenda which you are dealing with have been taken into account in making up the totals to which you have testified?

A. Yes, sir.

Q. So they are all included in the totals?

A. Yes, sir.

Q. They are not changes?

A. There are no changes in the totals except for the corrections as

we found them going along, giving the changes, such as I made this morning, for instance.

Q. Is that true of all these schedules for the other plants also?

A. Yes, sir.

1467 By Mr. PAGE:

Q. This completes the apparatus of the Consolidated Gas Company that is used for the manufacture of coal gas?

A. Yes, sir.

Q. At these two stations, 14th Street and 42nd Street?

A. Yes, sir.

Q. In giving the capacity of the plants at 14th Street as 5,000,000 cubic feet per day and at 42d Street as 4,500,000 cubic feet a day, did you take that as the maximum daily capacity?

A. Yes, sir.

Q. Could you run works at that maximum daily capacity?

A. Yes, sir.

Q. Could you run works at that maximum daily capacity for any length of time?

A. Continuously.

Q. What candle power gas did you estimate would go through these works at this capacity? Just the ordinary coal gas as it is produced, is that it?

A. Yes, sir.

Q. Then you would add to the total capacity of the works, would you, the oil gas that is added as enricher?

A. Yes, sir.

Q. Are all parts of the two stations up to that full capacity?

A. Yes, sir.

Q. That is, the retorts, purifiers and condensers?

A. The entire apparatus is that capacity.

Q. And you could run it at that capacity during the period of the highest demand?

A. Yes, sir.

Q. In the winter months?

A. Yes, sir.

Q. All through the month of December?

A. Yes, sir, or longer, if necessary.

Mr. MATHEWSON: I do not think the witness is a gas maker, or an expert in the particular line in which the Senator is questioning him, but whatever he says, for what it is worth, I have not objected. He is not a gas manufacturer.

Mr. KIRBY: It is not what the works do. It is the appa-

1468 ratus there, with which he seems to be familiar.

Mr. MATHEWSON: There are a good many other things though, such as shutting down for repairs, &c.

Q. Now in the various buildings that you appraised, are all of them in actual use now for the manufacturing purposes of the plant?

A. Naturally.

Q. How about the apparatus?

A. All in use.

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Q. There is nothing upon this appraisal that you have given here that is not in actual use to-day in the plant?

A. No, sir.

Q. Now as I understand, you did not make your appraisal by finding out how much this property actually cost the company and then making an allowance for depreciation?

A. No, sir, I never saw any figures of that kind.

Q. Is it your idea that gas-making machinery by use enhances in value?

A. Some of them do, yes, sir.

Q. What particular part of the gas machinery becomes more valuable by use?

A. Well, for instance, water gas generating apparatus.

Q. We are talking about the coal gas stations?

A. Oh, particularly about coal gas? You want nothing except new engines, exhausters and apparatus of that kind. Those which have moving parts, they are better operated after they have been submitted to some wear and tear and have the proper bearing and do not heat and do not bind.

Q. Well, you mean by that that any machine when it is first operated is stiff and does not give its maximum capacity?

A. Yes, sir.

Q. But if it is run for a few weeks and has "found itself," as they express it, I believe, then does it continue to increase in value?

A. No, it does not increase its value, but it maintains its
1469 value.

Q. Then if it should appear that this very apparatus cost the company very much less than these estimates which you have given would you change your estimate or your appraisal at all?

A. No, sir, I would not.

Q. Why not?

A. My estimates are based upon my own personal knowledge of these matters for a good many years and therefore I cannot be wrong.

Q. And therefore if the company actually paid less you think the company must have been wrong?

A. Well, I don't know how they established their selling prices, but my values are based upon actual facts as they exist to-day.

Q. Then, as I understand it, you are not attempting to find the capital of the company that was invested in the plant, but what someone would have to pay if they got you to build them a plant somewhat similar to this to-day, is that it?

A. That is the idea exactly, with the exception that it would be an exact duplicate of the plant as it exists to-day.

Q. If, however, you were going to build a coal gas plant to-day of a capacity of 9,500,000 cubic feet per day, would you reproduce this identical plant?

A. I would not.

Q. You could not buy in the open market to-day, could you, all the apparatus that is used in these plants?

A. With a few exceptions, yes.

Q. There is nothing appearing in your testimony, nor have you

any knowledge, of how much of this plant came to the Consolidated Gas Company at the time of its consolidation in 1884?

A. No, I know nothing about it.

Q. And don't you know what particular portions of the plant have been added since that time?

A. No, I do not. That is I mean to say I do not know at
1470 the present time. I have been figuring on the work myself for some years, but I cannot state just now what they are.

Q. The additions that you have made yourself to the plant of the Consolidated Gas Company have been made to the 14th and 42d Streets, or to the water gas stations?

A. I made some in 42d Street, I believe, and a few apparatuses in the 14th Street; I think some at 21st Street—I don't recall exactly all the works now. There are other stations which I don't recall at the present moment.

Q. In making this appraisal, did you state the actual amount received by you for making these additions?

A. No, sir.

Q. Did you take a larger or smaller amount?

A. That I can't tell, because I did not refer to the figures which they received at all.

Q. Well, then, as I understand it, this valuation of yours is not the valuation of this plant as it exists, but you have taken a mental picture of the plant and estimated what it would cost you to reproduce such a plant to-day, and have made a mental estimation of the weight of such a plant and multiplied it by some other figure to produce the appraisals that you ave presented here to-day?

Mr. MATHEWSON: I object to one portion of that question as a conclusion. The Senator states he has not taken the value of the plant. It is our contention that the value of that plant is what it would cost to reproduce the plant to-day. It causes the witness to discriminate in a matter of law, which he is not competent to do.

Mr. PAGE: That may go to the weight.

The MASTER: I think he may answer it. It is proper on cross-examination. That is, if he can answer.

A. If you mean by the mental picture of the plant a care-
1471 ful, personal examination of the same then you are correct. I have based my valuations upon a careful, personal examination and estimated each and every item in detail of what that value would be to-day if I were asked to build a new plant.

By Mr. MATHEWSON:

Q. Less depreciation that has accrued?

A. Yes, except when depreciation is mentioned.

By Mr. PAGE:

Q. You mean by that that you take first what it would cost you to build a similar plant to-day, and then from that standard you figure off a certain percentage for depreciation, that amount being the amount that the property in its present condition has depre-

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ciated from the standard which you would establish as a thing which you would produce to-day, is that so?

A. As absolutely new apparatus, yes.

Q. Yes. As absolutely new apparatus?

A. Yes.

Q. I understand that if you were to produce a plant to-day which would produce the results that this plant does, that you would not build this kind of a plant; is that right?

A. Not if I were asked to build a plant with the total maximum capacity as it exists to-day.

Q. And you could build such a plant cheaper could you not than the estimate which you have given?

A. No, it would cost more, but it would be better. It would include a great many apparatus which these plants do not include.

Q. But your result in the cost of gas produced at that plant would be very much less, wouldn't it?

A. Yes.

Q. Take merely the item of the number of retorts to a bench and the size of the retorts; you have stated that it would take less
1472 fuel per hundred pounds of coal carbonized in the larger retorts and more retorts to the bench, and you would make a saving that way?

A. Provided you compare the benches of the new plants of the same type with the benches in the existing plant.

Q. Yes.

A. That is, if you compare benches of both plants with full depth regenerating furnaces, one with the other, or benches without any regenerating furnaces, one with the other.

Q. Well, you would not manufacture to-day a bench without regenerating furnaces, would you?

A. I would not.

Q. Now, as to the item of labor, don't you save on labor by having the modern bench where there are more retorts to the bench and larger retorts than you would upon the old-fashioned bench that is used in these 42d and 14th Street plants?

A. The difference would be very slight when you apply machinery, when you apply stoking and drawing machinery and work the same to the full capacity of the machines, then you save in one instance as much as you would in the other almost.

Q. Now you have stoking and drawing machines at 14th Street?

A. Yes, sir.

Q. But you have not in 42d Street?

A. No, sir.

Q. Now, the inclined retort takes even less fuel, doesn't it than the horizontal retort?

A. That is not due to the location of the retort, it is due, as I said before, to the furnace applied under the retort settles; if you have the same depth of furnace under the inclined retort as you have under the horizontal retort, then the fuel consumed in both would be alike.

Q. Yes, but they do not, do they?

A. They do. There are many instances where the heating sur-

face in the inclined was absolutely the same as the horizontal, both styles of retorts being of the same length.

1473 Q. Is that so in the inclined retort house at Astoria?

A. That is the case, yes, sir.

Q. That it was the same depth and the same heating surface?

A. Approximately. I don't know the exact dimensions, but I think that the horizontal retorts have approximately the same cross-sectional dimensions as the inclined retorts.

Mr. MATHEWSON: As a matter of fact, we have both horizontal and inclined.

Mr. PAGE: I know, but I am talking about the inclined retort house, as I say.

Mr. MATHEWSON: We have installed both kinds at Astoria, and don't know which will be the best.

Mr. PAGE: I limited my question to the inclined retort house.

The WITNESS: There is no difference where the heating surface of the retorts is the same in both cases and the same method of heating is applied.

Q. Now, in arriving at the prices for some of your materials here you say you applied to the manufacturers and got estimates from them?

A. In su.. apparatus which are of standard makes and in the instance of retort benches.

Q. That was to be installed, wasn't it, the plant installed?

A. And brick work installed complete, to which I added my iron work, in the instance of benches, at my own valuation and my own estimate.

Q. Would not the contractor add 10 per cent. for engineering in his estimate?

A. Undoubtedly, for his own work, in each and every instance.

Mr. MATHEWSON: But that would not dispose of the supervision of our own engineers.

The WITNESS: But that 10 per cent. added on the end
1474 would not affect the other 10 per cer That is an entirely different percentage.

Q. Then on any apparatus that would be furnished by contractors there would be 20 per cent., would there for engineering?

A. No, sir, the contractor would only add 10 per cent. for his own shop cost, operating expenses, wear and tear of plant, &c., while the 10 per cent. which is added to the end of these estimates is for expenses which the gas company would have in addition to the cost which they paid the manufacturer for the apparatus, for their own engineering costs.

Q. Well, then, as I understand it, if you went to a contractor who gave you a bid on an apparatus that would cost him $10,000 and he would add 10 per cent., which would be $1,000, you would put that in this estimate and add another 10 per cent. to the $11,000 in getting at your estimate of price or of cost?

A. Exactly.

POOR COPY

By Mr. MATHEWSON:

Q. Would not his 10 per cent. be in his own estimate or bid?
A. The first 10 per cent. would be in his own bid or estimate.
Q. You would not put it in?
A. No, I only put in one ten per cent. to his bid.

By Mr. PAGE:

Q. But you would take his figure at $11,000, put that in, and add your ten per cent. to it, wouldn't you?
A. I would.

By Mr. MATHEWSON:

Q. You mean to say that if his bid or estimate was ten thousand dollars you would add one thousand dollars to that for his bid?
1475 A. No, for the general engineering of the plant that ten per cent. is created by the gas company for the entire construction of the plant as such, not for any individual apparatus. If I should buy any individual apparatus for repairs and so forth, I should not add anything for engineering expenses; but in laying out and constructing a gas plant that ten per cent. is needed and added by the gas company and more than that in many instances. You must remember that that ten per cent. includes a great many other items, such as filling holder tanks with water and curbing, grading and sewerage. I enumerated them the other day, miscellaneous expenses.
Q. Now, we will turn to the 21st Street plant. The 21st Street station is a water gas plant, isn't it?
A. Yes, sir.
Q. And also includes a plant for the manufacture of oil gas to enrich coal gas at the 14th Street station, is that right?
A. Yes, sir.
Q. Will you give us the value of each of the buildings?
A. The total value of all buildings without the ten per cent. for general engineering and the five per cent. for interest charges amounts to $1,579,695.
Q. Well, I asked you to take up the buildings in detail.
A. Stove storage and meter proving shop, $57,470 without depreciation, $56,320 with depreciation.
Mr. PAGE: You have given the dimensions of these buildings, have you?
The WITNESS: Yes, sir, they are in the schedule.
Mr. MATHEWSON: They are all given.
The WITNESS: Meter repair shop and office, $59,530 without depreciation, $58,340 with depreciation.
1476 Stove repair shop, $26,830 without depreciation; $26,294 with depreciation.
Stove cleaning room, $1,285 without depreciation; $1,260 with depreciation.
Diaphragm room, included in stove repair shop.

Prepayment meter repair shop $14,557 without depreciation, $14,266 with depreciation.

Storage room $1,836; without depreciation; $1,800 with depreciation.

Washroom, $1,512 without depreciation; $1,482 with depreciation.

Q. All the buildings you have mentioned up to and including the last were built in 1890, were they?

A. Yes, sir.

Q. And you figured the depreciation at the rate of two per cent.?

A. Yes, sir.

Q. Proceed.

A. Boiler house, without depreciation $11,023 with depreciation, $10,742.

Oil storage house, without depreciation, $221; with depreciation $210.

Lead and yellow metal storage house, without depreciation $650; with depreciation $618.

Fire hose house, without depreciation $54; with depreciation $51.

Valve house, without depreciation $2,828; with depreciation, $2,743.

Q. Now the last three buildings before this one were built in 1890?

A. Yes.

Q. And this last building was built in 1883?

A. That is the way I have it here.

Q. That is the valve house?

A. Yes. Octagonal valve house, $2,592 without depreciation; $2,463 with depreciation.

Valve house, $475; without depreciation; $452, with depreciation.

Q. That building was built in 1880?

A. 1880, yes, sir.

1477 Q. And the Octagonal valve house in 1883?

A. 1883.

Tinsmith shop, without depreciation, $3,193; with depreciation $3,033.

Q. That was also built in 1880?

A. 1880.

Storeroom, triangular building, without depreciation, $320; with depreciation, $295.

Paint shop, triangular building, without depreciation, $320; with depreciation, $295.

Office building, without depreciation $20,000; with depreciation, $19,000.

Q. That building was built in 1860, wasn't it?

A. 1860 is what I have it down here.

Engine room and machine shop and gangway, without depreciation $74,991; with depreciation $71,240.

Q. That building was built in 1865?

A. 1865.

Engine room, without depreciation $8,600; with depreciation $8,428.

Q. That was also built in 1865?

A. Yes, sir.

Machine shop, without depreciation, $2,200; with depreciation $2,156.

Q. Built in 1865?

A. 1865.

Old retort house, without depreciation $74,860; with depreciation $71,117.

Foundation for benches in old retort house, $11,800. No depreciation.

New shop building, $7,420 without depreciation; $7,272 with depreciation.

Q. That building was built in 1890, wasn't it?

A. The new shop building.

Q. Yes.

A. 1890, yes, sir.

Old carbureter house, $8,176, without depreciation; $7,768 with depreciation.

Q. That was built in 1860?

A. 1860.

Generator house over machines 6 to 13, without depreciation, $63,569; with depreciation, $61,663.

1478 Q. That building was built in 1865?

A. 1865, yes, sir.

Q. Just state that in each instance where you have it.

A. Building over coke and coal storage without depreciation, $85,140; with depreciation, $83,437. Built in 1865.

Generator house, 22nd Street, without depreciation, $93,840; with depreciation, $91,963. Built in 1873.

Retort house, 22nd Street. Without depreciation $110,450; with depreciation, $104,926. Built in 1865.

Extra for bench foundation in this house, $12,700. No depreciation.

Pump house, without depreciation, $4,796; with depreciation $4,556. Built in 1865.

No. 1 shed, south side of 21st Street, without depreciation, $67,846; with depreciation $65,811.

Nos. 2, 3, 4, and 5 sheds, same values as No. 1 shed.

Q. Each?

A. Each, just the same value as No. 1 shed.

Q. Those were all built in 1874?

A. All built in 1874.

Purifier house, without depreciation, $97,626; with depreciation, $94,697. Built in 1874.

Condenser and scrubber house, without depreciation $97,626; with depreciation, $94,697.

Another purifier house of the same value. All built in 1874.

Meter house without depreciation, $38,665; with depreciation, $37,891. Built in 1884.

Shaving and scrubber house without depreciation $66,017; with depreciation, $64,037. Built in 1874.

Exhauster house, without depreciation, $42,943; with depreciation, $42,084. Built in 1884.

No. 327 to No. 331 Avenue A, not valued; included in real estate.

1479 Coal shed, without depreciation, $63,168; with depreciation, $60,010.

Stable not valued, included in real estate.

Water tower, without depreciation, $1,387; with depreciation, $1,277.

Excavation, cribbing and refilling for twelve oil tanks located on low ground, $8,118. No depreciation.

The same for ten separating tanks, $8,462; no depreciation.

One foundation for a new oil tank, $5,000.

One foundation for a steel tank, $980. No depreciation. That is all for the buildings.

Q. In arriving at the value of the buildings, I suppose you proceeded in the same method, taking the number of cubic feet contents of the buildings and multiplying that by some unit?

A. Yes, sir.

Q. What was your unit for a brick building?

A. What kind of a brick building?

Q. Any kind, it don't make any difference, does it?

A. Yes, it makes a big difference, because all these prices are based upon a specific building. You cannot compare a retort house with a generator house, or you cannot compare a generator house with an office building, but they are all brick.

Q. I thought you went by the cubic contents, no matter what the walls were?

A. No; I go by the cubic contents or the cubic feet of contents of a building, for the same class of building, not of all buildings That would not be a fair valuation. You take a retort house in one place and a retort house in another, or you take a generator house in one place and a generator house in another place, and you get a correct valuation.

Q. If you had estimated by what it would cost to put up the walls and what it would cost to put in the other material, then you would have the same unit for all kinds of buildings?

A. No, sir.

1480 Q. Brick costs as much if you put it in a retort house as if you put it in a generator house, does it not?

A. But the number of bricks that you put in a retort house of the same capacity, as far as the general plant is concerned, in comparison with the generator house would be very different; it would not by any means be the same number of bricks, the number of cubic feet would be the same.

Q. Oh, I do not mean that.

A. You have got to make a comparison for the same class of buildings otherwise you would not obtain a correct valuation.

POOR COPY

Q. What was your standard of comparison with this 21st Street plant?

A. For the retort house, the retort house of Kings County; for the condenser house, the condenser house of Kings County, for the office building, which is a two-story office building, I took the Kings County. In the instance of the buildings, it includes all the valuations of the machinery and apparatus, except where I found that additional foundations of greater depth had been built at a very much greater cost. In this instance I have added the increased cost of the foundations where they did not compare with normal conditions, as was the case of Kings County.

Q. Kings County was a coal gas plant, wasn't it?

A. Yes.

Q. Did that make any difference?

A. No; most of these buildings were originally coal gas buildings.

Q. And have been converted into water gas buildings?

A. Yes; I know from my own knowledge, and having figured these buildings so many times for various plants, that the total aggregate of the buildings forming a gas plant is so near correct that if you were to get detailed estimates of each and every building there would be no variation of any amount.

Q. The buildings in this plant as I understand you, were originally put up for a coal gas plant and have since been turned
1481 into water gas?

A. In a great many instances; there were some additional water gas buildings, but the generator house was built for water gas purposes and it is exactly the same.

Q. Now, the generator house in a water gas works would be very much smaller than it would be in a coal gas plant?

A. Of the same capacity, yes.

Q. Then, if you were to give an estimate for building a water gas works to-day they would correspond with this in capacity and other particulars, but you would build smaller buildings, would you not, in some respects?

A. The buildings would be smaller for capacity; that is, a similar building would contain a larger capacity, but the price of that individual building would not change at all; my unit price would be absolutely applicable.

Q. Your unit price would be applicable, but the multiplication by the number of feet would be less and would produce a less cost?

A. Exactly.

Q. What is the capacity of this plant for water gas?

A. 24,000,000 cubic feet.

Q. Now, I do not wish to have any misunderstanding about this. You could build a 24,000,000 cubic foot daily capacity water gas plant in the way of buildings for considerably less than this 21st Street plant requires in the way of buildings now, could you?

A. Oh, no, these buildings are all completely filled with water gas machines to their full capacity.

Q. How recently have you been to those buildings?

A. Three or four times. What station are we on now.

Q. 21st Street. Is the retort house completely filled with gas making machinery to-day?

A. You asked me about water gas apparatus.

Q. I am talking about water gas. You have got down here retorts.

A. That is for the oil gas.

1482 Q. Well, call it generating house.

A. Yes, the generating house is completely filled.

Q. Have they built any new generators in there, do you know, in the last year and a half or two years?

A. I have not got the year when the last water gas apparatus was installed, but every foot of space in that entire works is taken care of by the capacity of plant. In fact, they are so close that in the generator house they are so close they are almost two together, and the walls have been broken out and columns have been substituted.

Q. Then, you think as far as the buildings are concerned—that is, if you build a coal gas plant and afterwards tear it out and instal water gas machinery you can do it cheaper than you could produce a new water gas plant with buildings adapted to that particular kind of plant?

A. Oh, yes, no doubt about that.

Q. And that is the most economical method of construction, would you say, as a gas engineer?

A. If I had the building, yes; I certainly would not tear the building down and build a new one.

Q. That is what you mean. Having a coal gas plant, it is cheaper for you to alter those buildings and instal gas machinery than it would be to tear down the buildings and build entirely new buildings?

A. Yes, sir.

Q. And if you were starting with a piece of ground, which would be the better way and produce the better results?

A. You would have to build new buildings; it would be better to build new buildings.

Q. You do not think it would be cheaper to build a coal gas plant and change it into a water gas plant?

A. No, sir.

Q. That is what you said?

A. I said if I had a coal gas plant.

1483 Q. Then, as a matter of fact, it would cost less to build a new water gas plant on this 21st Street station of the capacity of 24,000,000 cubic feet in the way of buildings than you have estimated for the value of the buildings at present in use; is that so?

A. No, sir, it would cost more. I said before that those buildings are entirely filled to capacity of water gas plant, and therefore new buildings would cost more if built for water gas.

Q. We are talking about an entirely new plant.

A. Yes, those buildings would cost more than changing these, for the same capacity.

Q. Well, I do not know if you understand my question.

A. I mean on the basis of water gas capacity, those buildings in the altered condition cost less than new buildings would have cost if they had to be built for that purpose, for the reason that the entire buildings are filled entirely to capacity.

Q. As I understand your method of getting at this, you have figured what it would cost to produce new buildings similar to these?

A. Yes.

Q. And you have not estimated what is the value of those buildings, but what it would cost you to-day to build buildings similar to this?

A. Yes.

Q. Now, if you were going to build a plant, a water gas plant, of 24,000,000 cubic feet daily capacity, would you build buildings similar to this?

A. Absolutely the same, in that location.

Q. You would?

A. Yes; I could not do otherwise, because they have utilized every square foot of ground in these buildings to the capacity of the apparatus, that is the controlling factor in the designing of the plant.

Q. And you could fill them to capacity and use them to much better advantage?

A. No, that is the point I am making. Those buildings are used entirely to capacity. Every square foot is used to capacity?

1484 You could not do better except by designing the building in different shape.

Q. Then you have an ideal water gas plant?

A. For that portion of it, yes.

Q. As far as the buildings are concerned?

A. As far as the generator house is concerned; we are talking about the generator house.

Q. I am talking about the buildings?

A. Oh, yes, the rest of the buildings contain apparatus of standard make and, therefore, could not be designed different from what they are in that location.

Q. Having settled that satisfactorily, we will turn to the apparatus. I notice you begin with your storage, tools in meter proving shops, &c. Does that correspond with the order in which the buildings are taken up?

A. No, sir, it does not.

Q. This repair shop is used for the repairing and proving of meters for the company generally?

A. Yes.

Q. And also for storage and repairs of stoves?

A. Yes.

Q. The capacity, &c., would not be limited to what would be necessary for a plant of the size of the 21st Street station alone? That is, if that was all the company had; it would not require as large a shop for a company that only put out 24,000,000 cubic feet of gas a day as they have there, but this is to take care of those things that are necessary for all the stations, is that right?

A. Yes, but it is not by any means large enough; they use it to the best advantage because they have it there.

Q. Yes, but the only thing I am trying to get at is, not criticising them for having a large repair shop, but if we wish to get an estimate of valuation upon a plant of 24,000,000 cubic feet daily capacity, you would not take this as one of the elements, because this is very much larger than is necessary, is it not?

A. No, it is not larger than necessary.

1485 Q. Not larger than is necessary for a company that only puts out 24,000,000 cubic feet of gas a day?

A. No, I know a company that puts out a good deal less gas than they do and has repair shops of three or four times that capacity.

Q. Proceed then and get at the value. How would you multiply this?

A. In getting at the value I took the building as it was.

Q. Well, this is an ideal plant; it is not anything that really exists that you are testifying to.

Mr. MATHEWSON: That is exactly what it is, something that does exist.

Mr. PAGE: No, it is an intangible figment of the moment.

Mr. MATHEWSON: Not at all. You are entirely wrong.

Q. Well, proceed with what substantial facts you can give in regard to what is in this particular house.

A. Do you want me to read this whole list?

Q. You have estimated this in its entirety; you have not the details.

A. I had the details and got them from all these various manufacturers. There is such a multitude of them that I added them together and put down the total sum.

Q. Have you got the value of the engines?

A. All engines, $17,600 without depreciation, and $17,248 with depreciation.

Q. How many engines does that make? You might read off just the engines.

A. One 15-horse-power Otto gas engine.

One 30-horse-power steam engine.

One 10-horse-power vertical steam engine, pulleys and shafts, etc.; all that goes with the engines.

Q. Whatever you have included with the value of the engine you might give.

A. One nickle-plated dynamo, 75 feet of 1 and 3/16-inch

1486 dynamo shaft; 6 cast iron pulleys, 12 to 18 inches diameter, 4 14-inch hangers, 12 16-inch hangers, 14 wooden pulleys, 13 to 18 inches diameter, 4 cast iron pulleys, 6 to 10 inches diameter, 12 feet of 1-inch shafting, 3 14-inch hangers, 3 counter shafts, 7 hangers, 16 inches by 2-3/16 inches diameter, two wooden pulleys, one elevator, 4 by 6 feet, 28 municipal arc lamps, 12 feet of 1-7 8-inch diameter shafting, 3 16-inch hangers, 18 feet of 2-3/16-inch diameter shafting, 8 cast iron pulleys, one emery grinder, 6 polishing lathes, 321 feet of 4-inch belting, 757 feet of 2-inch belting, 166 feet

of 6-inch belting, 100 feet of 1-½-inch belting, one Sturtevant exhauster, 12-inch outlet, one 3-cylinder Westinghouse gas engine, 6 twelve-inch hangers, 18 feet of 1-1/8-inch diameter shafting, one Knowles double cylinder steam and air compressor, one Westinghouse 8-kilowatt lighting generator, 20 feet of one-inch shafting, 5 twelve-inch hangers, 3 cast iron pulleys, three feet of one-inch countershafts. That is all.

Q. The items you have now enumerated are included in the valuation of engines $17,600, are they?

A. Yes, sir.

Q. Now, the other various apparatus.

A. $14,300 without depreciation, $14,157 with depreciation.

By Mr. MATHEWSON:

Q. What does that make the total?

A. That makes a total of $31,900 without depreciation and $31,405 with depreciation.

Q. That is all, down to the boiler house?

A. That is all, down to the boiler house.

By Mr. PAGE:

Q. What are the gas consumer governors used for that you have in this schedule?

1487 A. They are governors probably that they put on the pipe lines in the houses. I presume they are to assist in the equal adjustment of pressure under the conditions that exist here.

Q. Now you may take up the contents of the boiler house?

A. Boiler house; do you want that in totals?

Q. I think you had better give that separately; there are only a few items.

A. Two 60 horse-power boilers, $2,710 without depreciation; $2,440 with.

Q. Those are locomotive boilers, so-called, are they?

A. Yes, sir.

Q. Each with 72 tubes, 2½ inches and 3 inches, 13 feet long; is that right?

A. Yes.

—. Proceed.

A. One 3-inch Worthington meter, $50.

Q. That is a water meter?

A. A water meter, yes, sir; no depreciation.

Two 24 by 30 steel stacks, $96; no depreciation.

Thirty cubic yards of fire brick blocks, $780, no depreciation.

Oil storage house, total contents, $50, no depreciation.

Q. What does that mean?

A. The oil tanks, cocks, and spiggots, and connections and things like that.

Q. What is the capacity for oil storage in that house, do you know?

A. No, sir, I do not; that is for a lubricating house.

Q. Oh, a lubricating house.

A. Yes, only $50 for the whole contents.

Q. I thought you were running a pretty small oil can.

A. That is a lubricating house. Lead and yellow metal storage house, entire contents, $250; no depreciation.

Q. What does that mean, the entire contents? Is that the lead and metal stored in there?

1488 A. Lead, yellow metal, smelting pots and all things like that, all small things.

Q. Proceed.

A. Fire hose house: Entire contents, $250, no depreciation.

Valve house: Do you want that in detail or the total?

Q. You might give the items in detail.

A. Photometer closet with bar photometer, $650, no depreciation.

Three gas pressure gauges, $10, no depreciation.

One Bristol recording gauge, $35, no depreciation.

One electrical pressure indicator, as called for by item 1 of addenda, $250.

Octagonal valve house, one 7 feet by 7 feet wood tank, $360, no depreciation.

One gas lamp on roof, and four gas lamps in walls, all five lamps, $40, no depreciation.

Tinsmith shop: Rigging, blocks and other contents in that house, $150, plus $400, as per item No. 2 in addenda; no depreciation.

Store room: Contents, $60; no depreciation.

Office building: Contents, except chemical apparatus in laboratory, $1,650; no depreciation.

Q. Does that include the two photometers?

A. Yes, sir, the two photometers and all office furniture, but no apparatus in the chemical laboratory.

Chemical apparatus for complete laboratory, $4,000.

Q. Well, do you mean that is chemical apparatus they have there or what would be necessary to make a complete laboratory?

A. They have everything complete there. That is a complete laboratory of all the works.

Q. That is the only laboratory they have?

A. They have a laboratory of the chief chemist of the company where he makes all his tests, besides smaller sized laboratories

1489 in some of the stations, but this is the principal laboratory where they make all their tests.

Q. Proceed.

A. Engine room: One Knowles combined duplex boiler feed pump, 18-inch stroke, special pattern, $440 without depreciation; $418 with depreciation. To this must be added item 4 under addenda, $400 without depreciation; $380 with depreciation.

Q. What is that item?

A. That is the Knowles combined duplex boiler feed pump.

Q. No, but this item of $400 that you add?

A. That is the cost of the pump, on account of it being made especially to the increased length of the stroke; the stroke was 18 inches long, and it was a special pattern made for the Consolidated Gas Company. My first valuation was on the normal standard of that pump.

POOR COPY

By Mr. MATHEWSON:

Q. How much does that make all told for the pump then? Give it to us in a single figure.

A. That makes a total of $840 without depreciation, and $798 with depreciation.

By Mr. PAGE:

Q. Is that what it would cost to replace that pump?

A. Yes, sir.

Q. Or is that what the pump cost to the Consolidated?

A. No, that is what the pump cost the Consolidated.

Q. You could probably replace it cheaper?

A. No, sir, I got this price from the Knowles Pump Works?

Q. As to what they charged them?

A. What they would charge for that pump to-day.

Q. Proceed.

1490 A. One Blake combined boiler feed pump, $996 without depreciation; $946 with depreciation.

One Cameron pump, $302 without depreciation; $286 with depreciation.

220 cubic feet Connersville exhausters, $5,780 without depreciation; $5,753 with depreciation.

Two horizontal Buckeye engines, $6,182 without depreciation; $5,997 with depreciation.

Q. What is the horse-power?

A. I haven't got the horse-power down here. Probably in the neighborhood of 60 horse-power—more than that—probably 75 to 80 horse-power. 24-inch stroke that is.

Q. Do you know how old those Buckeye engines are?

A. No, but I know they are in thorough condition, perfect in every respect.

Q. Proceed.

A. Three McKenzie exhausters, $5,100 without depreciation; $5,000 with depreciation.

Three 12-inch by 12-inch Rowland vertical engines, $3,642 without depreciation; $3,569 with depreciation.

Two 10-inch leather link belts, $275; no depreciation.

One 10-inch 4-ply leather belt, $85; no depreciation.

Two McKenzie oil gas exhausters, $2,660 without depreciation; $2,607 with depreciation.

Two 6 by 7 vertical engines, $396 without depreciation; $388 with depreciation.

One Armington & Sims, 10½ by 12, $1,155 without depreciation; $1,132 with depreciation.

Three Buckeye horizontal engines, $12,144 without depreciation; $11,901 with depreciation.

Q. What is the horse-power of those?

A. Probably 80.

Q. The same as the others then?

A. A little bit higher. The others were probably 75 and

1491 this probably 80, I don't know but these prices were gotten from the Buckeye people direct.

Three Sturtevant No. 16 blowers, $5,950 without depreciation; $5,831 with depreciation.

Two Cameron pumps, 14 by 7 inches by 33 inches stroke, $1,185 without depreciation; $1,126 with depreciation (refer to Item 5 in addenda).

By Mr. MATHEWSON:

Q. That was a special pump I see. Does that mean a special size?

A. That is a special size, yes, sir, on account of the stroke—33 inches. That is due to the fact that they are for so large a plant as this where the pumps and normal capacities and dimensions would not be sufficiently large and therefore they were compelled to have pumps of special stroke made to answer their purpose.

One slate gauge board, $120; no depreciation.

Steam and water pressure gauges, steam exhaust and blast piping, $4,500; no depreciation. (See Item No. 6 in addenda.)

Three 22-inch 2-ply leather belts, 60 feet long, $396; no depreciation.

Item No. 7 of addenda for blast piping, $1,094; no depreciation.

Machine shop. Do you want that in detail or added together?

By Mr. PAGE:

Q. Have you got the engine separate?

A. One Greenfield engine, 10½ by 12, $1,350 without depreciation, $1,310 with depreciation.

Q. You have something else there of $1,800, haven't you?

A. Three tons pulleys, cast iron countershafting, one half ton fittings, and working benches and three vises, $1,800; no depreciation.

Q. Give the total for the machine shop if you have got it,
1492 including addenda.

A. Total for the entire machine shop, $5,935, without depreciation, $5,757 with depreciation, in which I included items 8 and 9 in the addenda.

Q. And also the engines you have testified to specifically?

A. And the engines, yes, sir.

Old retort house: Two stacks of 8 benches of six-s, 32 single benches, $70,720, without depreciation; $60,112 with depreciation.

Q. What are those used for now?

A. For the oil gas, for the production of oil gas.

Q. Do you produce oil gas in benches?

A. Those are oil gas benches.

One Worthington duplex fire pump, $178 without depreciation, $170 with depreciation.

By Mr. MATHEWSON:

Q. You have something in the addenda there, 9½?

A. I have got that in the detailed price already.

Two drip pumps, $159 without depreciation; $152 with depreciation.

Smith shop, $1,430 without depreciation; $1,376 with depreciation.

POOR COPY

New shop buildings, entire contents, $835 without depreciation; $823 with depreciation.

Old carbureter shop, in detail:

One English duplex air compressor, $2,750 without depreciation, $2,612 with depreciation.

1 Cameron pump 18 by 16 by 20 inches, $2,750 without depreciation, $2,612 with depreciation.

One Knowles pump 20 by 18 by 24 inches, $4,140 with depreciation; $4,480 without depreciation.

Q. Those are all standard apparatus?

A. With the exception of the pumps they are all special patterns. Yes, all standard.

Q. The three are standard?

A. Yes, sir.

1493 Q. Two 5,000-gallon rectangular tanks, $240 without depreciation; $233 with depreciation.

A. Witness continued:

Two 1,000 gallon rectangular tanks $80 without depreciation; $77 with depreciation.

One steam trap, $50; no depreciation.

Retort house on 22nd Street.

Three salt water condensers, 45 feet 6 inches by 9 feet 5 inches by 16 feet, containing 653 3-inch diameter cast iron tubes, $92,120; no depreciation.

Q. Is that a special condenser?

A. Yes, sir.

One similar condenser, $30,700 which is now in the course of construction. No depreciation.

Q. How did you figure that cost?

A. Why, from the weight; I figured the weight of the condenser and multiplied it by 4.9 cents a pound.

Q. You did not take the actual amount that had been expended for it?

A. No, sir, I don't know anything about what they spent for it.

Generator house over machines six to thirteen; Eight sets low water gas apparatus with 12-foot generators, 16 feet high; 11-foot carbureters, 16 feet high; 11-foot superheaters, 25 feet high; eight wash boxes, 4 feet high. Total price, $140,000; no depreciation.

Q. When were they put in, do you know?

A. No, sir, I did not inquire. They are in proper repair and perfect condition in every respect. Cast-iron floors and columns surrounding machines, as per Item 30 in addenda, $47,520; no depreciation.

Two hydraulic elevators, $4,000 without depreciation; $3,800 with depreciation.

Q. Where there is any specially designed apparatus, in reading these off, would you mention them, to save time?

A. Yes, sir.

Two Cameron pumps, $170 without depreciation; $162 with depreciation.

1494 Small gas piping, water piping, tar piping, &c., together with 600 feet industrial track, $279; no depreciation.

Add for industrial railway I omitted from schedule, as per Item 10 in addenda, $360 without depreciation; $342 with depreciation.

Building over boiler and coke storage house: Two Babcock & Wilcox boilers, 500-horse-power each, $16,500; no depreciation.

Q. Do you know the age of those boilers, when they were erected?

A. No, sir, but they are in perfect condition and kept right up-to-date in the way of repairs, else they could not use them for the water gas production.

Two new boilers of 600-horse-power each in course of erection.

Q. Do you mean foundations?

A. No, the foundations are finished and the boilers are being erected now. The boilers are right alongside of the foundations. $19,800; no depreciation.

Q. In this item, page 5, foundations going in for two more boilers, rated as 600-horse-power each?

A. That is for my memorandum. The foundations are already completed and the boilers alongside the foundations.

Q. Then your estimate is for the foundations and the boilers in their present condition?

A. No, this is for the boilers alone, $19,800; no depreciation. That just happened to be copied that way from my personal memorandum so as to call my attention to it.

Two A. & T. boilers, Altman & Taylor, 500-horse-power each, $16,500; no depreciation.

Q. Do you know the age of those boilers?

A. No, sir, but they are all in the same perfect condition and have to be in order to operate the plant.

Two steel stacks, 7 feet diameter by 110 feet high, $3,440; no depreciation.

1495 Two breeches for above stacks, $887; no depreciation.

One additional stack, as per Item 11 in addenda about one-third of which is completed at the present time, $573; no depreciation.

Two Armington & Sims engines, 10½ by 12, $2,310 without depreciation; $2,194 with depreciation.

Q. Do you know the age of those engines?

A. No, sir, I did not bother about the age of the engines because they are all perfect.

Q. Specially designed?

A. No, sir.

Two American Blower Company, fan blowers, $920 without depreciation; $902 with depreciation.

Three filter presses, Johnson & Company's make, $2,550 without depreciation; $2,422 with depreciation.

Q. Standard presses?

A. Yes, I think they are.

One centrifugal tar eliminator, $1,200 without depreciation; $1,140 with depreciation.

One horizontal engine, 7 by 9 inches, $264 without depreciation; $250 with depreciation.

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One round cast-iron tank, 15 feet diameter, 12 feet high, $2,442 without depreciation; $2,320 with depreciation.

By Mr. PAGE:

Q. At what rate per pound?
A. At 5.8 cents per pound.
Q. For cast iron?
A. Yes, sir, that is with flanged and faced joints and bolts.

By Mr. KIRBY:

Q. Upon what did you appraise the foundations for the boilers in building over boiler and coke storage?

A. The boiler foundations, as well as all other foundations,
1496 are included in my valuation for the buildings and that unit figure which I spoke of before covers the foundations of these various apparatus.

Q. Proceed.
A. Two wrought iron tanks, 6 feet diameter, 4 feet 6 inches high, $153 without depreciation; $150 with depreciation.
One wrought iron rectangular tank in ground, $695 without depreciation; $626 with depreciation.
Three No. 4 Cameron pumps, $825 without depreciation; $784 with depreciation.
2,000 feet industrial railway track, switches, crossings, turntables, and so forth, $1,700 without depreciation; $1,649 with depreciation, which includes item 12 in addenda.
Q. Now, you come to the generator house?
A. Generator house on 22nd Street.
Five sets low water gas apparatus, 13 feet by 16 feet 6 inch generators, $100,000. No depreciation.
Q. Do you know the age of that Low apparatus?
A. No, the same as the others; they are in perfect condition.

By Mr. MATHEWSON:

Q. Does that include the carbureters, superheaters, wash boxes and connections?
A. Everything called for by the schedule.

By Mr. KIRBY:

Q. On this statement, down to where it says "one experimental oil gas machine?"
A. Yes, and that item above it.
Mr. BURR: What does that embrace?
The WITNESS: That includes carbureters, 13 feet in diameter by 16 feet 6 inches high; superheaters, 13 feet diameter by 32 feet high and wash boxes 7 feet diameter.

1497 Mr. MATHEWSON: And twenty-four connections?
The WITNESS: Arranged for twenty-four inch connections, and connections between the various apparatus above named.

By Mr. KIRBY:

Q. Proceed.

A. One experimental oil gas apparatus, $12,000. No depreciation.
Q. Is that a special machine?
A. Yes, sir.
Q. Is it in use to-day?
A. Yes, sir, it has been specially constructed by the gas company for a specific purpose.
Six Hazelton boilers, 250 horse-power each, $23,250 without depreciation; $22,088 with depreciation.
One Cameron pump 6 inches by 3 inches by 6 inches, $86 without depreciation; $82 with depreciation.
One Cameron pump 6 inches by 4 inches by 6 inches $90 without depreciation; $85 with depreciation.
One Worthington pump, 6 inches by 4 inches by 6 inches duplex pump, $92 without depreciation; $87 with depreciation.
Add for item No. 30 and including gas, steam, water, tar and oil piping, $47,520 without any depreciation.
Q. What do you mean by charging stage?
A. That is the floor around the apparatus upon which the coal is stored and from which the appartus are operated.
Q. Now you have the retort house?
A. Retort house on 22nd Street. Twenty single benches of 6's, $44,200 without depreciation, $37,570 with depreciation.
1408 Q. Do you mean by simple benches that they are separated one from the other?
A. No, that is only an expression to designate the length of the retort. They are set back to back, having a total length of 18 feet, but the price per bench is based upon 9-foot benches, therefore they are termed single benches.

By Mr. PAGE:

Q. What are they used for?
A. For the making of oil gas, the same as the others.

By Mr. BURR:

Q. Is addenda item 14 embraced in that item?
A. Yes, sir. There is one stack of 10 benches which consists of two benches back to back, making 20 in all.

By Mr. KIRBY:

Q. Proceed.
A. For 40 enamelled iron wash basins and 180 expanded metal lockers, $2,420, no depreciation.
Q. Going back to those benches for a moment, you used a depreciation factor of 15 per cent., didn't you?
A. Yes, sir.
Q. Over the entire cost of the benches?
A. From the entire value of the benches.
Q. Do you know when those benches were last replaced?
A. I have not the year down here, but on account of the setting having been in there a number of years, I made the depreciation 15 per cent.

Q. Do you know how many years they had been there?
A. I don't know now, but on account of that item I make the depreciation 15 per cent.
Q. That would mean a life of how long?
A. Perhaps—these benches last very much longer than the coal gas benches, you know.
1490 Q. I understand.
A. You cannot make a comparison on that basis because they are subjected to very different conditions.
Q. That is rather a high depreciation factor for them, isn't it?
A. No, not a great deal.
Q. You don't know whether any of them had been replaced in the last ten years, do you?
A. Yes, I know they have, without asking any question about it.
Q. You know that on account of the depreciation factor?
A. I know by my own experience, that they would not last ten years.
Q. They would not have to be replaced every three years?
A. No.
Q. Or five years?
A. No.
Q. Probably ten years?
A. Perhaps six to eight years, maybe in some instances ten.
Q. Well, go on.
A. Two tar separating tanks, a total of $4,340 without depreciation, and $4,123 with depreciation, from which deduct for item 15, $965 for apparatus, without depreciation, and $897 for apparatus, with depreciation, making a total price for the two tanks, without depreciation, $3,375, and 3,226 with depreciation.

By Mr. KIRBY:

Q. What did you deduct from the separator tanks?
A. On account of the difference in weights. In measuring them over again, I found they did not weigh as much as I had originally estimated.
One Worthington duplex pump, $314 without depreciation; $299 with depreciation.
Two Cameron pumps, $880 without depreciation; $836 with depreciation.
One Cameron pump, $550 without depreciation; $522 with depreciation.
One Worthington duplex pump, $250 without depreciation; 237 with depreciation.
1500 Two Cameron pumps, $170 without depreciation; $161 with depreciation.
One Cameron pump, $275 without depreciation; $261 with depreciation.
Q. Those pumps are all of standard design and build?
A. Yes.
Add, as per Item 16 in addenda, oil tank, 6 feet diameter, 10 feet deep, $189 without depreciation; $176 with.
Q. Those wrought iron tanks are used for what?

A. There is only one tank, 6 feet diameter by 10 feet.

Mr. MATHEWSON: He has not testified as to the others.

The WITNESS: That is in the addenda.

Q. Go on then.

A. You have an item there of 10 feet diameter by 30 feet long tanks in your schedule; that should be omitted. It has been substituted by Item No. 17 in the addenda.

Q. What is that item, will you read it?

A. It is ten tanks underground, 11 feet diameter by 39 feet 6 inches, ⅜-inch metal.

Q. What are those tanks used for, do you know?

A. For oil storage.

By Mr. PAGE:

Q. What is the capacity?

A. I have not got the capacity, but I can figure it out for you if you want me to.

Q. No, never mind, I thought you had it there.

A. Pump house——

Q. Haven't you left out some tanks.

A. I say those have to be omitted, those tanks, I think I said so just now. The new ones come in in the addenda.

1501 By Mr. MATHEWSON:

Q. The substituted ones come later on in the addenda?

A. Yes, sir.

Pump house:

Two Worthington duplex pumps, $356 without depreciation; $338 with.

One Cameron pump, $550 without depreciation; $522 with.

One Blake duplex pump, $250 without depreciation; $237 with.

Two Knowles duplex pumps, $374 without depreciation; $356 with.

Two Cameron pumps, $170 without depreciation; $161 with.

One Cameron pump, $385 without; $366 with.

By Mr. KIRBY:

Q. Those pumps are all standard pattern and build?

A. Yes, all standard.

Two wrought-iron tanks, $652 without; $620 with.

Q. Having a capacity of 3,750 gallons and used for the storage of oil?

A. Yes.

One Foster pump, as per Item No. 18 on addenda, $400 without depreciation; $388 with.

Two wrought-iron tanks, $364 without depreciation; $345 with.

Sheds, Nos. 1, 2, 3 and 4, contents, coal not considered in valuation.

One hydraulic elevator, $2,100 without depreciation; $1,195 with.

Shed No. 5, firebrick and purifying material not considered in valuation.

One Cameron pump, 14 by 7 by 18, $467 without; $444 with.

One hydraulic elevator, $2,100 without; $1,995 with.

1502 Q. Do you know who the builder of those hydraulic elevators was?

A. No, sir.

Q. There is nothing special about them, is there?

A. No, just ordinary plunge elevators, which you can buy from any elevator manufacturer.

One vertical boiler, $520 without, $478 with depreciation.

One accumulator as per item 19 in addenda, $1,200 without depreciation, $1,196 with depreciation.

Q. Now, we come to the purifying house?

A. Purifier house, eight boxes, 22 by 36 by 3 feet deep with wrought iron covers, cast iron columns and beams, two sets of hydraulic lighting gears, and two 36-inch center seals. Total value without depreciation, $62,799, with depreciation, $59,659.

By Mr. PAGE:

Q. What is the capacity of this purifier house?

A. All the purifier houses in the total are equal to the capacity of the plant of course.

Q. Are they operated with the relief holders?

A. Yes.

By Mr. KIRBY:

Q. You have not figured separately the capacity of each of the separate houses?

A. No, sir.

Q. You figured this cost by taking the weight at so much, giving it a value of 5.6 cents a pound?

A. 5.6 cents a pound.

Q. And multiplying by the weight?

A. Yes. In the figures which I have given is indicated the item No. 20 in the addenda.

Q. Which one?

A. Some additional weight. Do you want the total weight?

Q. Never mind.

A. Condenser and scrubber house. The first item, six

1503 tubular condensers should be omitted entirely, for which a deduction of $41,460 must be made as per item in addenda No. 21.

Q. Why do you omit that?

A. I have got them in twice.

By Mr. MATHEWSON:

Q. You have had it in twice, you mean?

A. Yes, sir. They were all considered in page 8 of my sheet; two scrubbers 14 feet in diameter, 35 feet high, $9,344, no depreciation, which includes item No. 22 in the addenda.

By Mr. KIRBY:

Q. Which was figured by weight and price per pound?

A. All the apparatus was figured by weight and a price per pound, except where they were standard and I had to get prices from the various manufacturers.

Six condensers 30 by 7 by 17; wrought iron sides, cast iron base, wrought iron tubes, containing 650 4-inch diameter by 12-foot tubes, $98,280; no depreciation.

Q. You used as your unit there 8.4 cents per pound?

A. Yes.

Q. How do you arrive at that figure?

A. The average price of the material for that condenser was 2.2 cents per pound.

Q. By average price of material you mean the average price for wrought iron and cast iron used in the construction?

A. Exclusive of the tubes; the cost of the tubes was 4.8 cents per pound; the average price for all material including tubes is 3.8 per pound, the freight and drayage is three cents per pound; shop labor two cents per pound; erection five cents per pound; makes a total of 6.6 per pound, to which is added for operating
1504 expenses wear and tear of shop of tools 10 per cent., making 66 cents; total, 7.26, to which must be added manufacturer's profit equal to 1.1, making 8.36 per pound, or a total of 8.4 cents per pound.

Q. And to that in the grand total you add 10 per cent. for engineering and other charges?

A. For engineering by the gas company, the designing and laying out of the entire plant and other expenses in connection with the construction of the entire plant as a plant.

Q. Or, if you were to construct it for them, which you would add for your own expenses?

A. Yes.

By Mr. MATHEWSON:

Q. You assume that a contractor who puts in condensers figures on some profit to himself and does not simply figure on the work for the cost of labor and material?

A. No, I included 10 per cent. in those figures that I mentioned.

By Mr. KIRBY:

Q. And you have reckoned that a contractor would erect this apparatus for the figures which you have there?

A. Yes, sir.

Q. And would figure 10 per cent. profit on the order?

A. Yes. As per item No. 23 in addenda deduct $16,380.

Q. What for?

A. For one condenser in course of construction which is already included in the six condensers; it was included twice.

By Mr. MATHEWSON:

Q. Does that mean the total, $98,280?

A. No, this has to be deducted from that, and in my total it is taken care of, in my total price.

Q. Which you have testified to?
A. Yes, that has all been taken care of.

1505 By Mr. KIRBY:

Q. So that the six condensers have a value of $98,280?
A. Yes.
Q. Where does your deduction come in?
A. Because in this I added a new condenser which was in course of construction, which would have been added twice, and it is in the six condensers already.
Q. Then there is no deduction to be made?
A. Oh, yes, from this price you have got to make a deduction of $16,380.
Q. Then we will have the cost of the six condensers?
A. The cost of the six condensers complete including the new one which I added twice. I had first the six and then an extra one.
Q. In other words there are five condensers and then a new one making six altogether?
A. Yes, I had already the new one in twice. First I had six and then a new one.

One oil gas meter, as per Item 23½ in addenda, $3,850; no depreciation.

Shed: One hydraulic elevator, $2,100 without depreciation; $1,995 with depreciation.

Six shaving scrubbers, $18,232; no depreciation.

Galleries around shaving scrubbers, with mill exhauster, with vertical engine, dust collectors and piping, and one Cameron pump, $3,342 without; $3,301 with depreciation.

Another shed: Twelve purifying boxes, 24 by 24 by 17, with twelve wrought-iron trunk-shaped covers, three 36-inch center seals; two hydraulic purifier carriages $86,968 without depreciation, $82,620 with depreciation.

Q. What item have you added there?
A. No. 24.
Q. What is that?
A. Additional weight, the first calculation being short.

Meter house: Two 13-foot station meters, $11,750 without depreciation; $11,162 with depreciation.

1506 Two 19-foot station meters, with wrought-iron cases, $21,600 for the two; no depreciation.

By Mr. MATHEWSON:

Q. That is, after deduction as per your addenda Item No. 25?
A. Yes, that is the corrected figure as per Item No. 25 in addenda.

One 19-foot cast-iron station meter, $10,800; no depreciation.

Q. Also, after deduction, as set down in addenda Item No. 26?
A. Yes.

One 16-inch Wylie proportion meter, $1,600; no depreciation.

By Mr. KIRBY:

Q. They are standard meters, all of them?

A. These are not standard; they are a size not made of standard proportions.

Q. And therefore for which you have set down a special price?

A. No, I got that price from the meter company.

Q. They are built then by a meter company?

A. They are built by a meter company, but special dimensions, on account of this large capacity of the works.

Exhaust house:

Two McKenzie exhausters, 30-inch.

By Mr. BURR:

Q. You have here three McKenzie exhausters?

A. The price is charged for two, $3,980 without depreciation; $3,900 with depreciation.

One 36-inch McKenzie exhauster, $2,200 without depreciation; $2,156 with depreciation.

Three Rowland 12 by 12 vertical engines, $3,300 without depreciation; $3,234 with depreciation.

1507 By Mr. KIRBY:

Q. Do you know how old those engines are?

A. No, sir; but they are all in perfect condition. Wherever I find a machine in perfect condition and up-to-date in operation——

Q. No matter what its age is?

A. No, I don't care what its age is.

Q. Nor do you care what the type may be?

A. No, not as far as the condition is concerned. Of course, the type has a bearing upon the valuation.

Q. How did you get the prices for those Rowland engines?

A. By applying to them for the prices.

Q. And doing that you must have mentioned the type, did you not?

A. Well, it was the type, the Rowland engine is made by the Rowland Company.

Q. But there are different types from year to year; their type of 1900 is not identical with their type of 1906?

A. Oh, yes, no change in that. There may be some changes in a few small minor details which would not affect the price of them.

Now, 321 to 327 Avenue A, omitted from valuation included in real estate. Coal shed——

By Mr. BURR:

Q. What becomes of all these other items opposite to 327 and 331 Avenue A. One 5 horse-power White and Middleton gas engine?

A. That is all included in the real estate. I don't know why that was, but it was telephoned to me.

Mr. MATHEWSON: It meant the building, not the apparatus. Just make a note of that.

The WITNESS: They are all very small items.

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By Mr. KIRBY:

Q. You are of the impression that these items are included in the real estate.

1508 Mr. MATHEWSON: No, they are not.

Mr. KIRBY: He has got it down here.

Mr. MATHEWSON: I know, but he is not under that impression.

The WITNESS: It would not amount to one thousand dollars the whole business.

Coal shed, containing one bucket elevator.

Two 20-inch Robins conveying belts and

Two cross belts, $8,000 without depreciation; $7,200 with depreciation, to which item must be added as per item 27 in addenda, $10,000 without depreciation, and $9,500 with depreciation, which item is for underground conveyor from dock to coal shed, conveyor trench and coal hoisting machinery at dock.

Q. What valuation have you put on your Greenfield vertical engine?

A. One Greenfield vertical engine 10½ by 12 inches, with pulley and shafting $1,155 without depreciation; $1,097 with depreciation.

Stable, included in real estate.

Water tower in yard, steel tank 20 feet diameter 30 feet high, value without depreciation $2,035; with depreciation $1,975.

In the retort house yard, steel tank 14 feet diameter by 9 feet 2 inches deep, $628 without depreciation; $565 with depreciation.

Steel tank 10 feet diameter by 9 feet deep $382 without depreciation, $344; with depreciation.

Steel tank 14 feet diameter by 4 feet 6 inches deep in lower portion, 13 feet diameter by 5 feet 6 inches in upper portion; $590 without depreciation; $530 with depreciation.

Separate item No. 28 in addenda, one new oil tank 57 feet diameter by 30 feet high; all material and on ground ready for erection, $3,000; no depreciation.

1509 Q. This tank has a capacity of how many gallons?

A. I have not the number of gallons. It is 57 feet in diameter.

Q. Well, proceed.

A. Steel tank 7 feet diameter by 20 feet high, $655 without depreciation, $590 with depreciation.

Steel tank 20 feet 1 inch by 38 feet 1 inch by 8 feet 8 inches deep, $2,056 without depreciation, $1,850 with depreciation.

Twelve steel tanks 8 feet diameter by 40 feet long, $1,808 without depreciation, $1,627 with depreciation.

Ten steel tanks 11 feet diameter, 39 feet 6 inches long, $16,795 without depreciation, $15,115 with depreciation. There has evidently been something omitted in the previous item of 12 tanks 8 feet in diameter by 40 feet long. I want to look whether my notes are right and whether it requires any correction. I will look it up to-night.

Steel tank 10 feet diameter by 9 feet deep, $410 without depreciation, $370 with depreciation.

Separate item No. 29 in addenda, one wooden tank 16 feet by 15 feet and one 12 feet by 15 feet high, $1,200 without depreciation, $1,176 with depreciation.

One steel tank 16 feet wide, 50 feet long, 2 feet 4 inches deep, $1,553 without depreciation, $1,475 with depreciation.

Q. Those tanks are all in use?

A. These tanks are now being erected for separating purposes. It is erected in place, complete on foundations.

Q. Which one do you mean?

A. The one 50 feet long.

Q. The other tanks are all in use?

A. All tanks are in use.

Q. For what purpose?

A. For separating purposes and storage purposes.

1510 Q. That finishes the apparatus in the 21st Street station, does it not?

A. Yes, sir.

At 5:30 P. M., adjourned to August 31st, 1906, at 1 o'clock P. M.

Last Exhibits:

Complainant's 233.
State's N.
City's 34.

1511 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *August* 31, 1906—1:00 p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Burr.

1512 FREDERICK J. MAYER resumed:

Cross-examination by Mr. PAGE (continued):

Q. Do you wish to make any correction in your testimony of yesterday?

A. One item in the 21st Street plant: 12 steel tanks, 8 feet diameter by 40 feet long, should read $18,080 without depreciation instead of $1,808, and $16,270 with depreciation instead of $1,620. That makes the total value of the entire plant for buildings, apparatus and

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pipe connections, including the ten per cent. for engineer's charges and five per cent. for interest $3,392,895 instead of $3,375,984.

Now, about this other item I included in the real estate I went to the 21st — Station and found that should have been in the schedule and not in the real estate.

By Mr. MATHEWSON:

Q. Those were the small items under what heading?

A. 327-331 Avenue A, those houses. I tried to get the prices for these various items this morning, but the time was too short and I could not get them and I did not want to assume any prices.

Q. You need not bother about it further unless I ask you to, because the items are comparatively small.

A. It is not over $1,250 for all of it, but I *I* did not want to assume any price because I did not in the rest of it.

By Mr. BURR:

Q. You said not more than one thousand dollars yesterday, but you say $1,250 to-day.

A. Not more than $1,250.

1513 By Mr. MATHEWSON:

Q. Would $1,250 be your estimate of the items there?

A. Yes, sir.

Q. That $1,250 you have not included in the total you have just given above?

A. No, sir; it is not included in it.

By Mr. PAGE:

Q. The generating apparatus of the 21st Street Station is practically new, isn't it?

A. Yes, sir; it is in a perfect condition.

Q. Well, I say it was put in, I think they testified here, in 1904?

A. Yes. It is in perfect, up-to-date, operating condition.

Q. What kind of a plant is it, what name does it go by?

A. It is an Improved United Gas Improvement Company's apparatus.

Q. Is it called a Lowe water gas——

A. The original Lowe type, yes, sir, improved.

Q. Is that as efficient a water gas plant as is manufactured?

A. It is the best manufactured in this country, in my opinion.

Q. How does it compare with the Jerzmanovsky?

A. It is an entirely different process. Jerzmanovsky includes a system of benches in addition to the water gas generators to carburet the water gas in a continuous manner, whereas in this instance the gas carbureted is produced intermittenly by the carburet and superheater attached to generator and therefore an entirely different type of apparatus.

Q. The Jerzmanovsky is more economical in the use of fuel, isn't it, than the Lowe type?

A. No, sir, it is not. That is if you add the three sources of fuel

consumption, consisting of generators, boilers and benches as compared with the two sources of fuel consumption in the instance
1514 of the United States Gas Improvement Company's apparatus which consists of the boilers and generators.

Q. Then if Mr. Addicks testified in Boston that the Jerzmanovsky would save six pounds per thousand cubic feet of gas made over the Lowe type of apparatus, you would think he was mistaken, would you?

A. No, sir.

Q. Well, do you think it?

A. It would in that Boston instance, because that was an improved Jerzmanovsky and not the Jerzmanovsky as it has been used here.

Q. Well, of course if you are building a plant to-day and that is what you are estimating on, you would put in the latest improved machine?

A. Then you could not call it a Jerzmanovsky. You asked me about a Jerzmanovsky.

Q. I merely call it what Mr. Addicks did.

A. Well, he called it wrong. I happen to know that particular instance because I was the one that improved it.

Q. That is what I had understood.

A. Yes, sir.

Q. I had understood that was your improvement.

A. So it was, that improvement, and that improvement was made in the generator by which a reduction of fuel of 25 per cent. of the Jerzmanovsky was produced.

Q. Then a plant installed with Mayer's improvement of the Jerzmanovsky generator plant would be a more efficient and more economically administered plant than this one at 21st Street?

A. With the latest improvements in the United Gas Improvements Company's apparatus the results are about on a par, amounting in both instances to about a consumption of 32½ pounds average to the thousand feet of gas produced. Since I made the improvement in Boston the United States Improvement Company has made other improvements which has reduced their fuel consumption.

1515 Q. Is this the apparatus that is used at 21st Street? Is it the latest improved U. G. I. Lowe process?

A. Yes, sir.

Q. And in its operation compares favorably with your improvement upon Jerzmanovsky?

A. Yes, sir.

Q. This substitution that was made of the improved U. G. I. Lowe process would save how much in fuel per thousand cubic feet of gas, you say?

A. As compared with what?

Q. As compared with the old process that was there before.

A. The old process?

Q. That was there before 1904?

A. I think the fuel consumption in the old apparatus ran up to approximately forty pounds, and I think they have some results to show now in which the consumption is down as low as thirty pounds.

Q. Did you give the total value of this 21st Street plant?
A. I think I gave that already.
Q. You have given your estimate of the cost of the coal gas plant, per unit of capacity?
A. I believe I did in connection with the 18th Street valuation.
Q. And that was how much?
A. If I remember correctly I believe $340 per thousand feet.
Q. What is the value of a water gas plant such as this 21st Street per unit of capacity?
A. $123 per thousand cubic feet, not including any holders, which I excluded in all valuations of this kind.
Q. That is the coal gas plant which you valued at $340 per unit of capacity, which is for a thousand cubic feet of gas produced, isn't it?
A. Yes, sir.
Q. Excluding the holder value?
A. Yes, sir.
Q. And you say that $123 would be the value of the unit capacity of a water gas station similar to 21st Street?
A. Yes, sir.
Q. Excluding holders also?
A. Yes, sir.

Q. Now, we will take up the 44th Street station. The 44th
1516 Street station of the Consolidated Gas Company is a water gas station, isn't it?

A. Yes, sir.
Q. And situated on 44th Street to 46th Street between 11th and 12th Avenues, in the City of New York?
A. Yes, sir.
Q. Will you state the capacity of that station?
A. 8,500,000 cubic feet in twenty-four hours.
Q. Now, if you will give the value of the buildings that you have already testified to as being upon the premises.
A. Governor house, without depreciation, $4,015; with depreciation, $3,815.
Q. And also state when built, if you can.
A. 1877.
Valve house, without depreciation, $3,041; with depreciation, $2,889. Built in 1877.
Carpenter shop, $3,465 without depreciation; with depreciation, $3,396.
Lumber shed, $1,771. No depreciation.
Purifier house, $60,668. No depreciation. Built in 1877.
Oxide room, valued in purifier house.
Meter house and office building, $14,556, without depreciation; $13,828 with depreciation.
Condenser and scrubber building, $14,697 without depreciation; $14,403 with depreciation. Built in 1877.
Engine exhauster and blower house, $27,362, without depreciation; $26,815 with depreciation.
Generator and boiler house, $56,788 without depreciation; $53,949 with depreciation; built in 1877.

Retort house, $61,482 without depreciation; $58,408 with depreciation; built in 1877.

Coal hoist, $228. No depreciation.

Concrete mixer and engine building, $475 without depreciation; $452 with depreciation.

Storage power tank building, $379 without depreciation, $342 with depreciation.

1517 Oil pumphouse, $3,306 without depreciation, $3,141 with depreciation; built in 1877.

Tar separator system, $1,775. No depreciation. Built in 1904.

Coal shed, $46,661 without depreciation, $34,996 with depreciation.

Scale building, $275. No depreciation.

Water tower, $1,564. No depreciation. Built in 1877.

Exhauster and boiler house, $3,416. No depreciation. Built in 1877.

Lime and oxide storage shed, $7,207. No depreciation.

Purifier meter and storage house, $44,460 without depreciation, $43,571 with depreciation.

Stable, $11,121 without depreciation, $10,899 with depreciation; built in 1877.

Tool shop, $2,563; no depreciation; built in 1877.

Storehouse, $1,541; no depreciation.

Small brick building, $788 without depreciation, $749 with depreciation.

Sheds, $366; no depreciation.

Blacksmith shop, $1,418 without depreciation, $709 with depreciation.

Pipe house, $55; no depreciation.

Pump house, $44; no depreciation.

All brick walls around works, $47,160.

All timber fences, $2,860.

Shed at oil storage tank, $188; no depreciation.

Salt water condenser foundations, $489; no depreciation.

Hot gas scrubber foundation, $353; no depreciation.

Air condenser foundation, $752; no depreciation.

Underground drainage tank in yard, $2,032; no depreciation.

Forced draft fan room, $122 without depreciation, $98 with depreciation.

1518 That makes a total for buildings without the 10 per cent. for engineering and 5 per cent. for interest charges, $407,767.

Q. I suppose you arrived at this result in the same manner as you did with the others that you have testified to, you took the Kings County buildings as a standard?

A. Yes, sir.

Q. And multiplied the number of cubic feet contents in these buildings by the unit that you obtained from dividing the cubic feet by the cost of the Kings County buildings.

A. Yes, sir, that is right. And I want to say in connection with this matter that in all instances where the buildings of the Consolidated Gas Company differed from those at the Kings County Works, for instance in the construction of the foundations, where the

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foundations were deeper on account of the quality of the ground or where piling had to be resorted to in order to establish a proper foundation, those additions were figured extra because they form an extra consideration outside of the basis of comparison with the Kings County buildings, which were all based upon good ground.

Q. Where are the Kings County Works situated?

A. I think it is at the foot of 55th Street in Brooklyn, on the water; it is right near the Edison Electric Station or the power house for the Edison Station.

Q. Well, you mean it is on New York Bay?

A. New York Bay, yes, sir. And the ground there was splendid building ground, consisting of sand.

Q. Then you added something for the additional cost of foundation?

A. Wherever they differed from the conditions existing in those Kings County Buildings, yes, sir.

Q. On what theory do you add ten per cent. engineering charge to the construction of the building?

A. The ten per cent. is on the total plant as such, not on
1519 the buildings alone, but on the plant as a total. That, as I already explained, contains all those charges which every gas company will experience in building a new plant and includes also the alterations made in the construction or during the course of construction which are necessitated sometimes by additions and change in apparatus and improvements, and there is no contract of that kind executed where there is not always a very large extra bill to be paid by the gas company on account of these cases.

Q. That would not apply to the buildings, would it?

A. Yes, sir; when you are making a change in your layout of apparatus it effects a change in the buildings and they have to be changed correspondingly, so the item of ten per cent includes that item as well as all others previously mentioned. And all these extras, the extra additions to the buildings in my estimate for changes in raw material were estimated in detail from conditions as I found them to exist at every one of these buildings, as near as I could ascertain them. Of course, I could not dig down and find out what the foundations were, but as near as I could ascertain it I took the description from the man who apparently had the information, and based upon that my detailed estimate.

Q. But as you had in this case a plant before you that you were going to duplicate, there would not be any changes, would there, in this case? You say you are going to duplicate this particular plant.

A. Therefore, I had to include extra cost for these foundations, which were not included in my original figures.

Q. But you would not have to allow for any alterations, any changes of plan, because that had been predetermined and foreordained, as to exactly what this plant was to be before you started.

A. That is so with all plants, they are always designed
1520 beforehand, and these changes take place during the construction when they see that improvements are necessary.

Q. But you could not in this case because you were going to produce the exact duplicate of this plant.

A. That is true, but the gas company had those expenses when they built the plant.

Q. But this gas company bought these buildings already built.

A. That I don't know.

Mr. MATHEWSON: Some company built them.

The WITNESS: Somebody built them.

Q. Now, we will proceed with the apparatus.

A. Governor house, entire contents, $1,655 without depreciation, $1,572 with depreciation.

Q. In this governor house I would like to have you state the kind of governor and what you valued that at.

A. Fifteen floor stands, $230.

One 24-inch Smith & Sayre governor, $1,275.

Gauges and furniture, $150. Making a total of $1,655.

Valve house, $50 without depreciation, $48 with depreciation.

Carpenter shop, $100 without depreciation, $95 with depreciation.

Q. Now the purifier house, is that next?

A. Purifier house containing eight purifiers, 24 by 24 by 3 feet deep, with wrought iron covers, two layers of trays, 24-inch dry center seals; two hydraulic lifts for the steel covers and supports for the purifiers, $43,680 without depreciation, $41,496 with depreciation.

Lumber shed not included in valuation. See item 1 in addenda.

Meter house and office buildings: two 14 foot by 14 foot station meters, with wrought iron cases, $11,750 without depreciation, $11,163 with depreciation.

Q. Does that include the foundations?

1521 A. No, sir, the foundations of the apparatus, as I have already stated, are all included in the various buildings.

Q. Will you give me the values, by referring to any notes you have, of the foundations under these two buildings?

A. No, they are included in the units of prices taken from similar buildings in the Kings County works, where these foundations were included.

Q. I know; but whatever figure you used here.

A. They are in the unit price.

Q. I know; but you had to multiply that unit by something to produce this result for these particular foundations, didn't you?

A. No; the foundations for the meters were contained in the instance of the Kings County buildings, and therefore your unit price established by using the Kings County buildings includes those costs of the foundations.

One 16-inch Wylie proportional meter and one small meter, 24 inches diameter with 2-inch connections, $1,600; no depreciation.

Office furniture, $800 without depreciation; $760 with depreciation.

One bar photometer, $650; no depreciation.

Q. Are you an expert on office furniture also, Mr. Mayer?

A. No, I am not.

Q. Go ahead.

A. Condenser and scrubber house:

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Two scrubbers constructed of steel with cast-iron base, 9 feet diameter by 21 feet 11 inches high, $3,575 without depreciation; $3,504 with depreciation.

Do you want me to read all the details in these different cases? I think you have them in the schedule.

Q. I think you had better read it in, as this is evidence and that schedule is not.

A. Two rectangular condensers, cast-iron base, 30 feet long, 6 feet 6 inches wide, 12 feet righ, for 24-inch connections;
1522 $31,752 without depreciation; $29,530 with depreciation.

Q. All the apparatus you have testified to so far was put in in 1877, wasn't it?

A. Yes, sir.

Q. And on these rectangular condensers with cast-iron base you took a unit price of 8.4 cents per pound?

A. Yes, sir.

Q. How much of that is wrought iron and how much cast iron?

A. Of the total I should say that the proportion of cast iron to wrought iron would be about as——

Q. Well, I will ask the question in another way which will come to the same result and be easier to answer. What is your unit of value for cast-iron, how much per pound?

A. For the cast-iron, 1.65 cents per pound; that is for the melted material; freight .2 of a cent; drayage .1 of a cent; molding .45 of a cent; machine work .85 of a cent; erection and labor .6 of a cent; total, 3.85 cents. To which must be added an item for wear and tear and operating expenses, .39 cents, making 4.24 cents, and a profit for the manufacturer of 15 per cent., making 4.88 cents. The price applied for this part of the condenser is 4.9 cents per pound.

Q. Is 4.9 cents per pound the unit you have used in estimating the value of all the cast iron?

A. No, sir, it is not.

Q. Or does that apply merely to the condenser?

A. To the condenser works, yes, sir.

Q. And what unit did you apply to the wrought iron in this condenser work?

A. The total price of cast iron and wrought iron combined brings the unit price up to 8.4 cents per pound; that includes the tubes, the tubes being a very much higher class of material than the balance of the work.

Q. The wrought iron would be 3.5, would it not?

A. The wrought iron alone, do you mean?

Q. I want to know what your two units are, which make
1523 a total of 8.4 cents a pound?

A. In this instance there is a cast iron base and the total weight would have to be proportioned between the cast iron and steel work. The addition of the two unit prices would probably be in the neighborhood of ten cents, but the average for the total condenser is 8.4, which as I said before includes the cost of the tubes, which is higher priced material than the balance of the wrought iron. I presume that the weight of this cast iron is approximately 8 per cent. of the total.

Q. You may proceed.

A. One Westinghouse No. 25 gas meter made by the Fuel Gas Manufacturing Company at Pittsburg, Pa., 24-inch diameter, 20 inches deep, $350, no depreciation. One Pelouze & Audouin revolving condenser with Smedberg improvement, $1,260 without depreciation, $1,197 with depreciation.

Q. Is that in use now, that Pelouze & Audouin condenser?

A. No, it was not in use when I was at the works.

Q. Do you know whether it is an abandoned apparatus?

A. No, sir, it is not. It is for the purpose of taking out tar by molecular attraction, and I presume it is only used in the winter time when they are making the coal gas.

Mr. MATHEWSON: It is the same form we are installing in Astoria now. It is not an out-of-date or unusued type.

The WITNESS: It is a very important apparatus in its present condition; some very large ones are being applied in the Astoria Works.

Q. Proceed.

A. Engine exhauster and blower house:

Two vertical engines made by F. G. & A. E. Rowland; 12 inches cylinder, 12 inches stroke, 4 inches steam and 4 inches ex-
1524 haust connections, 4 feet diameter and 5 inches wide fly wheel; diameter of driving wheel, 20 inches, $2,175; no depreciation.

Two Payne engines, 14 inches diameter cylinder, 14 inches stroke, 5 inches steam, 6 inches exhaust, fly wheel 5 feet in diameter by 16 inches wide with counterbalance attachment on wheels; each engine has two driving wheels 60 inches in diameter by 12 inches wide; each engine has extra bearings for 6 inches shafting. $3,980; no depreciation.

One horizontal Buckeye engine, diameter of cylinder 14¼ by 14 inches stroke, 5 inches steam, 6 inches exhaust connection, two driving wheels 80 inches by 12 inches wide $1,990; no depreciation.

Two McKenzie exhausters, 24-inch connections, 225,000 cubic feet per hour, $3,410; no depreciation.

Three No. 10 B. F. Sturtevant monogram blowers——

Q. Are those McKenzie exhausters?

A. Yes, sir.

Q. Are some of these engine governors and compensators or machines that you have been reading before, in connection with this?

A. No, not in this instance, because they are not exhausters, they are all blower engines. And in the instance of exhauster engines you would of course have to have a governor to control the speed of the engine.

Q. Are there any engines included?

A. Not of that kind in this plant because it is a water gas plant.

Three No. 10 F. B. Sturtevant monogram blowers, 12 inches by 12 inches driving pulleys, 24-inch discharge openings, $1,800; no depreciation.

One blast gate valve.

Two butterfly valves.

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One steel blast flue with connections to boilers, $290; no depreciation.

One compound duplex Worthington pump with Detroit
1525 lubricators, size of diameter, 10 by 16 by 17½, cast iron chamber, 6 inches suction, 5 inches discharge, 2 inches steam, and 3 inches exhaust, $670; no depreciation.

One Davidson pump No. 10 with cast iron air chambers, 16 by 18 by 10 inches, 6 inches suction, 5 inches discharge, 2 inches steam, 3 inches exhaust, $772; no depreciation.

Engine exhauster and boiler house:

One Knowles duplex pump 7 inches by 13 by 6 by 16 inches suction 6 inches discharge 5 inches, 2 inches steam, 3 inches exhaust, $656.

There is a depreciation on that but I have got several items added together in one lump, and the depreciation on all those is alike.

Q. You could just state that you have combined the apparatus in the engine exhauster and boiler house and figure the depreciation from the total, and that that depreciation amounts to two per cent.

A. That only refers to those two items and not previous ones. Those are all right.

One Spencer automatic damper regulator, $250.

One McClelland oil purifier tank, $53.

One Gild & Garrison No. 4 pump, 8 by 4½ by 10, $210.

One 10 by 16 by 18-inch Blake pump jet condenser, $650.

Countershafting, pulleys, bearings, hangers, brackets and so forth, $135.

The total of the above items from the Knowles pump down is $1,954 without depreciation; $1,915 with depreciation.

Generator and boiler house:

Two 8 feet 6 inches United Gas Improvement Co. sets, $29,000, no depreciation.

Four 12-feet United Gas Improvement Co. sets. Each set consists of generator, carbureter, superheaters and wash boxes, each 8
feet 6 inches, one scrubber 8 feet 3 inches diameter by 22 feet
1526 high, one condenser, 8 feet 6 inches diameter by 22 feet high, $70,000. The twelve sets have three scrubbers 12 feet 6 inches diameter by 22 feet high, $2,438. Total of the two above items, $72,438, no depreciation.

Q. Have you included the scrubber and condenser with the 8 feet 6 inches in set in the value of $29,000?

A. Yes, they are included, except in this instance the scrubbers were located outside of the building in a separate location. That is the reason they were estimated separately. In the above sets are included the necessary hot gas wells, water jacketed, generators and carbureters, necessary blast connections and also necessary generator, carburetor and superheating interlocking gears, oil heaters, gauge bolts and pressure gauges.

Q. I notice that the two 8 feet 6 inch sets you value here at $29,000.

A. Yes.

Q. Does that include the scrubber and condenser?

A. No, that was just the generating sets.

Q. Then you have stated separately the scrubber and condenser. Did you give any value to them, or is that included in the $72,438, taken together with the other sets?

A. Yes, scrubbers for the entire generators.

Four Hazelton porcupine boilers, 200-horse-power each, 6-inch steam take-off, necessary pressure gauges, water columns, &c., in brick settings, $10,800 without depreciation; $10,044 with depreciation. To the above must be added item No. 3 in addenda, $2,400 without depreciation; $2,232 with depreciation.

Two hydraulic lifts, 5 by 5 feet platform, with overhead hydraulic cylinder, $4,000 without depreciation; $3,920 with depreciation.

Q. Where did you get that item that you add?

A. Item No. 3 in addenda, under the heading of generator and boiler house.

1527 Cast-iron charging floors surrounding water gas apparatus, $11,234; no deprecation.

Q. Now, this Automatic Gas Improvement Company's sets and generators; they are the latest improved sets, the same as was installed in the 21st Street plant, or not?

A. Yes, they are all of the same type. That is, they are all modern sets all through.

Q. Those were installed in 1904, were they not, at 21st Street?

A. They were installed in 1894 and 1898.

Q. 1894?

A. That is what I have got down here, 1894 and 1898.

Q. Wasn't that before this improvement was made?

A. No, sir, the improvement was made since that time, but not of very big consequence. The principal improvement that they made was after the patent of the Wilkinson type of generator expired, and they adopted the reversal of steam, with one and the same generator and one and the same runner. That was previous to that time.

Q. These are the latest type?

A. Yes; there may be some minor differences in the operating gear made since that time.

Q. You may proceed.

A. Retort house:

Ten benches of sixes, back to back.

One floor fired furnace, $44,200 without depreciation; $39,780 with depreciation.

Q. Those are coal gas benches, are they not?

A. Yes, they were entirely reset in 1896.

Q. But they are water gas stations, they don't manufatcure any coal gas, do they?

A. They can use these benches for the production of coal gas the same as the 21st Street station.

Q. Well, do they?

A. They did not do it at the time I examined the plant, but I

presume they do it in the winter time to get up their candle power.

1528 Q. Candle power of what gas?

A. Of their water gas.

Q. Do you mean to say that you would enrich the water gas——

A. (Interrupting.) Mixture of water gas and coal gas; this gas may be taken from the 42d Street works.

Q. It is arranged now for use as an oil gas generator?

A. Yes.

Q. There is no difference in the retorts that would be used for the production of water gas and those that would be used for the production of coal gas?

A. It is absolutely the same retort. All you have to do is to put a pipe inside of it, vaporize it, and turn it out in the shape of gas instead of the coal.

Q. Is there any evidence of this having been done for that purpose?

A. I do not recall that exactly. It was not in use when I was there. I ascertained that that had been entirely reset in 1896, and that for that reason I made a depreciation of 10 per cent. What I mean by ten benches of sixes is really twenty benches. They are made back to back the same as I said yesterday.

Two Altman and Taylor B. & W. type boilers, set in one battery, 200-horse-power, with stack breeching boiler settings and steam piping, $7,637 without depreciation; $7,485 with depreciation.

Two Hazleton porcupine boilers, 200-horse-power each, with stacks, steam pipes, &c., $5,500 without depreciation; $5,390 with.

To this item should be added, as per Item No. 4 in addenda, $1,200 without depreciation; $1,176 with.

One No. 10 Monogram Sturtevant boiler, $600; no depreciation.

One 10½ by 12 Armington & Sims engine, with belting and fly-wheel, $1,210; no depreciation.

One No. 4 Garrison pump, 8 by 4½ by 10 inches, $190; no depreciation.

1529 One Berryman feed water meter 2 feet in diameter 8 feet high, $195; no depreciation.

Air and salt water condensers:

Two air condensers made by Logan Iron Works 33 feet long by 7 feet wide by 23 feet high, constructed of cast iron base with wrought iron flues, four flues to a section, 34 inches by 7 inches, each flue "U" shaped, 6 sections in all, $14,550 without depreciation, $13,920 with depreciation.

One salt water condenser of cast iron in four sections 31 feet long by 5 feet wide by 15 feet 3¼ inches high, containing 704 3-inch diameter, ⅜-inch cast iron tubes, 11 feet 7¼ inches long, $10,290; no depreciation. These condensers have been reconstructed lately.

By Mr. BURR:

Q. Give the size of connections?

A. That only refers to the connections; it don't include any connections.

Air and salt water condensers; 1 salt water condenser constructed of wrought iron 33 feet long 5 feet wide by 15 feet high, cast iron base, 24-inch connections; 3-inch cast iron tubes 12 feet 4 inches long, $8,036; no depreciation.

By Mr. MATHEWSON:

Q. Was the one before cast iron, the one salt water condenser just above this?

A. That was all cast iron.

Coal hoisting apparatus, 9 by 10 feet Hunt single, 2 cylinder hoisting engine, 4 tubes, 1,100 pounds capacity, 2 cars, 3,300 pounds capacity, 2 counter weights, 1 trolley, 15,000 pound Howe platform scale, 120 feet of trestle 20 feet wide by 25 feet high, 240 feet of track on 4 inches by 16 inches timbers, 480 feet 4 inches by 6 inches timbers carrying rails, 480 feet of rail, total $8,037 without depreciation, $7,876 with depreciation.

1530

Water tower, 1 Blake compound duplex pump, size 9 by 16 by 12 by 10, $1,831 without depreciation; $1,740 with.

One Worthington duplex pump 10 by 10¼ by 10, with gauges, piping and tools $450 without depreciation; $423 with.

One 20 feet diameter by 20 feet tank, ⅜ inches by ¼ inches steel plate, $1,333 without depreciation; $1,200 with depreciation.

Exhauster and boiler house:

One 24-inch McKenzie exhauster, $1,705, no depreciation.

One 8 by 8-inch Greenfield reversing engine, $468. No depreciation.

Two vertical boilers, 3 feet diameter by 9 feet high, $410 without depreciation; $399 with depreciation. They were not in use when I was at the works.

Q. Have you any idea of whether they were ever used?

A. Yes, they are used, I do not know for what purpose, but they are used.

Lime and oxide shed:

One Knowles C. & F. W. duplex air compressor, 12 by 20 by 18 inches, $2,750. No depreciation.

Purifier shed:

Four cast iron purifier boxes, 34 by 24 by 3 to 4½ deep, with 24 by 4 inches cups arranged for 24 inches connections.

Four wrought iron purifier covers, trunk shape.

Two hydraulic carriages 26 by 24, 3-inch by 9 feet high, constructed of steel. The boxes in this instance are supported by brick walls. Prices for the brick supports are included in the price of building.

One 20-inch high center seal.

Total $18,532 without depreciation; $17,606 with depreciation.

1531 Meter house:

One 14 foot diameter meter, wrought iron sides and head made by the Continental Iron Works, 24 inches connection, necessary gauges, water columns, and so forth, $6,300 without depreciation; $5,895 with depreciation.

To this amount must be added as per item No. 5 in addenda, $1,075 without depreciation; $1,022 with.

Two No. 7 Sturtevant boilers, dismantled, $400 without depreciation; $360 with.

Three dismantled walking beam engines $1,150 without; $863 with.

These are ready for repairs, and I value them in their present condition as no repair parts had been delivered, therefore, in one instance the depreciation is twenty-five per cent. and in another instance ten per cent. That is the present condition of the engines.

Q. Well, do you know whether they had been abandoned?

A. No, sir.

Q. Or whether they are merely in process of repair?

A. Merely in process of repair, and as there are no repair parts there I could not include it. If the repair parts were on the ground I would consider it perfect, otherwise I could not.

Stable, 23 stalls, two box stalls, all constructed of hard pine timbers, and feed racks, $460 without depreciation, $437 with.

Tool shop, the total contents of tool shop is only $1,540 without depreciation, $1,463 with.

Store house and annex, that is only a small amount, the entire contents $420, no depreciation.

Oil tanks underground, 13 tanks 18 feet by 30 feet, $11,578, three tanks 12 feet by 35 feet, $4,575. One tank 12 feet by 7 feet, $580. Total of the above tanks, $16,733 without depreciation, $14,232 with depreciation.

1532 Tanks overground, one 8 feet by 30 feet, $890 without depreciation, $846 with depreciation.

Filter press house, one filter press, Johnson & Company, $850, no depreciation.

Tar and oil system, various tanks, total amount, $662, no depreciation.

Pump shed, total contents, $358, no depreciation.

Blacksmith shop, total amount for forges, anvils, shears and punches, $319 without depreciation, $287 with depreciation.

Q. The last figures you gave, $319 and $287, related to all the contents of the blacksmith shop?

A. Yes, sir.

Power house, one Worthington Duplex, 10 by 10¼ by 10, $468, no depreciation.

One No. 10 Cameron, $360, no depreciation.

Oil tanks, No. 6 and No. 9, oil tanks in open, 40 feet diameter, 16 feet high, constructed of steel, set in circular pit, maximum capacity 150,000 gallons each tank, $9,750 without depreciation, $9,263 with depreciation.

Concrete mixer house:

One Sturtevant engine, 4 inches diameter, cylinder 6-inch stroke, $165 without depreciation, $157 with depreciation.

One concrete mixer, $400 without depreciation, $380 with depreciation.

(At this stage of the proceeding Mr. Kirby arrived.)

Q. What is that used for, that concrete mixer?

A. For mixing concrete for building purposes.

Q. That is some temporary affair, is it?

A. Well, they move that around wherever they have to mix concrete when they are building something for themselves, from one plant to the other.

1533 By Mr. MATHEWSON:

Q. For repairing?

A. Well, perhaps repairing and any kind of building they have to do, instead of spending manual labor for mixing that concrete they use this machine.

Q. I think some of the pillars are enclosed in concrete at some of the stations, by order of the fire department, to save the pillars in case of fire. If that had to be done we would have to use it?

A. Yes, sir, there are many occasions where they have use for this mixer, of course.

By Mr. PAGE:

Q. Proceed.

A. Storage tar tanks.

Three storage tar tanks constructed of wrought iron 8 by 8 by 7 feet 6 inches——

By Mr. BURR:

Q. You have 8 feet by 6?

A. 8 by 8 by 7 feet 6, carried on wooden beams set into ground, set inside of corrugated iron building, size of tanks 10 inches by 6 feet deep, two heads, total for the three, $1,848 without depreciation, $1,756 with depreciation.

Oil pump house:

Two steel oil tanks of 12 feet diameter, 7 feet high, and one 10 feet diameter 7 feet high, $1,218.

Two Davison single pumps 9 by 9 by 12 inches, $275.

Two Cameron pumps, 12 by 7 by 13, $314.

One Worthington duplex, 7½ by 4½ by 10, $197.

One Cameron No. 8, $314.

One Worthington duplex, 6 by 5¾ by 6, $128.

One Cameron No. 9, $325.

Total of above tanks and pumps, $2,771 without depreciation; $2,633 with depreciation.

Tar Separator system:

Constructed of wrought iron, ¼-inch thick by 54 feet long,
1534 15 feet wide, 6 feet 6 inches deep, with eight compartments, 8¾ tie rods and turn buckles, $2,250; no depreciation.

Scale house:

One 10-ton scale, ball-bearing platform, 13 feet 6 inches by 8 feet wide, set in brick pit, 12-inch walls, $300; no depreciation. That does not include the pit, of course.

False draft fan, one steel plate Sturtevant ¾-housed blower, directly connected to engine; size of fan, 50 inches by 30 inches, $1,000 without depreciation; $950 with depreciation.

By Mr. PAGE:

Q. Did you figure in that brick pit at all?

A. No, that is in the buildings.

Q. Did you figure that in the buildings?

A. Yes, in the scale house. It is not in this price of $300. All the items of fire brick, fire clay, coke and coal, they are all omitted.

Q. They are not included within the inventory?

A. No, sir, they were included once but you will find an item in addenda, No. 6, that this material is not to be considered in the valuation, but deducted. That was $11,715, which I deducted; it had been included first and then taken off again.

Q. What did you make the total amount of the value of the apparatus at the 44th Street plant to be?

A. $409,175, not including the charge for general engineering and interest charges.

Q. This capacity which you have given in regard to the 21st Street station and the 42d Street station I presume is the same as you gave in reference to the coal gas stations and is the total maximum daily capacity at which it could be run continuously?

A. Yes, sir.

Q. And all parts of the apparatus are up to that
1535 capacity?

A. Yes, sir. I found in each and every instance that they could probably run a little over that capacity. In fact in some instances they have run over that capacity.

Q. This estimated capacity of yours is the capacity at which it could be run continuously?

A. Yes, sir.

Q. And not what could be forced on special occasions?

A. No, sir.

Q. To carry a heavier load?

A. No, sir.

Q. Now, we will turn to the 99th Street station. The 99th Street station is a water gas station, is it?

A. Yes, sir.

Q. And a capacity of how much?

A. 5,500,000 feet.

Q. Now, you may proceed with the buildings.

A. Engine house, boiler house, pump house, machine shop, retort and accumulator house, total value without depreciation, $96,162; with depreciation, $91,354. Built in 1881.

Generator house, without depreciation, $30,732; with depreciation, $29,807. Built in 1881.

Foundations for air condensers, $900; no depreciation.

Foundations for salt water condenser, $368; no depreciation.

Office buildings, $8,922; no depreciation.

Meter house, $10,039; no depreciation.

Purifier house, $43,589 without depreciation; $41,409 with depreciation.

Lime house, $3,787 without depreciation; $1,984 with depreciation.

Valve house and drip pump house, $108; no depreciation.

Now, there are four valve houses, all of the same size, $513 each, without depreciation; $488 with depreciation.

1536 By Mr. KIRBY:

Q. What are those values for, for the house itself?

A. For the house itself, yes, sir.

Condenser and scrubber house, $10,185; no depreciation.

Exhauster house, $8,400; no depreciation.

Tar separator system, $1,775 no depreciation.

Pump pit, $624; no depreciation.

Tar storage, $128; no depreciation.

Coal shed, $21,600 without depreciation; $19,872 with depreciation.

Q. Is that coal shed a covered one?

A. Yes, sir, it is a brick shed, 125 by 46 feet and roofed.

Filter press house, $408 without depreciation; $388 with depreciation.

All walls around the works, $15,710, no depreciation. They were rebuilt in 1895.

Fences. All fences around the works, $3,380, no depreciation.

Cover over doors of oil tank and ground, frame shed, $534, no depreciation.

Foundation under hot scrubbers in yard, $498, no depreciation.

That is all for the buildings.

Q. In estimating the value of these buildings substantially to-day, did you use any factor for obsolescence, or are they all up to date and none of them obsolete in type, or partly so?

A. Some of them are in a perfect condition. All those where there was no depreciation allowed they are perfect in every respect.

Q. I mean if any of these buildings were to be constructed to-day for the purpose indicated, would you as an engineer construct them the same way as they are now built, or would you construct them in some other way?

A. No, sir, I see no reason to make any change for that particular plant.

1537 Q. But for a plant of that capacity?

A. Yes.

Q. To have a plant of the greatest efficiency, would you construct them in this particular way?

A. For a plant of the same capacity, located on the same ground, I would construct the buildings in the same manner, in the same relative positions.

Q. In other words, if there were no buildings upon that plot of ground of any kind or character, and you were given an order to construct a gas plant of that capacity, that is, a water gas plant, you would construct these buildings in the same way and place them in the same relative positions as they are to-day?

A. Yes, sir.

Q. Making no changes of any kind?

A. None whatever. In connection with that I might say what I said formerly that every inch of ground space of all these plants is utilized to its utmost capacity and you can do no more than that in any well constructed plant.

By Mr. MATHEWSON:

Q. And there is no chance in these to increase the capacity now, so far as you can see, because all the space is already utilized?

A. Not at all. There is not an inch left for any increase unless you go up in the air, which isn't practicable for gas works purposes.

By Mr. KIRBY:

Q. Do you know on which of these two blocks of page 9, Exhibit 48, the various buildings are situated?

A. You mean do I know whether the buildings are situated on those two blocks?

Q. Which of those two blocks the various buildings are on?

A. Oh, I can't tell from memory now. I went all over every building.

1538 Q. It is not indicated on your notes so you could inform us of it?

A. No, sir. The totals of all the buildings at the 99th Street plant, without the 10 per cent. for engineer and interest charges is $248,247.

Q. You have not figured that 10 per cent. and 5 per cent. on these separately, have you?

A. Only on the total result.

Q. The grand total?

A. Yes, sir.

By Mr. BURR:

Q. What was that other figure of $96,162 and $91,354 that you gave us?

A. $96,162 without depreciation and $91,354 with depreciation. That is for the engine house, boiler house, pump house, machine house, retort and accumulator house.

Q. What is this last amount you have given us?

A. It is the total of all the buildings.

By Mr. KIRBY:

Q. Now we will take the apparatus?

A. Generator house: 4 sets of 10 feet U. G. I. Lowe water gas apparatus with 24 inches gas take-off mains; each set consists of a 10 feet diameter by 14 feet high generator.

Mr. BURR: Concretor, it is here.

The WITNESS: It should be generator; with three 19¼ inches diameter coaling doors, one 10 feet diameter by 15 feet 11 high carbureter with necessary water and oil connections.

One 10 feet diameter by 22 feet high superheater with necessary superheater stacks, 36 inches diameter by 20 feet high, over all.

One 8 feet 6 inches diameter by 4 feet hot wash box.

These sets have necessary hot gas valves with air jackets,
1539 also necessary generators carbureters and superheaters, interlocking gears, from meters, gauge apparatus, coal guards and so forth. The apparatus, together with the surrounding charging floor is valued at $64,167, with no depreciation.

Q. What is the apparatus alone valued at?

A. $56,000.

Q. Being $8,167 for the charging floor?

A. Yes, sir.

Q. Do you know when that apparatus was installed?

A. 1904.

Q. The old type?

A. Yes, sir.

Q. And the present type U. G. I. Lowe water gas apparatus?

A. Yes, sir.

Q. Why do you figure them altogether as one item?

A. Why that is the way the apparatus is furnished by the United Gas Improvement Company and I got this price from them; in fact they are the water gas purifiers for the various works.

Q. In other words, when you give specifications for a water gas apparatus, you generally include with it the other apparatus mentioned by you?

A. Yes, sir.

Outside of generator house. Air condenser. Construction of cast iron base——

Q. You may give those altogether.

A. —.

Length of wall, 35 feet 7½ inches width 11 inches.

Size of connections 24 inches.

$8,025 without depreciation; $7,615 with.

Q. Do you know the age of that construction outside of the generator house?

A. Well, I had it down here over twenty years, but there is a question mark around that because it was in such perfect condition.

Q. You have, therefore, only figured five per cent. depreciation?

A. Yes, sir.

Q. Notwithstanding an apparent age of twenty years?

A. No, there wasn't any difference.

1540 Mr. MATHEWSON: The witness says he is not sure that it was twenty years, the condition was so good, as I understand him.

The WITNESS: I understood it was about twenty years, but the condition was so good I could not believe it.

By Mr. PAGE:

Q. Where did you get the information that it was twenty years?
A. From the superintendent.

Yard:

Salt water condenser. Cast iron, 31 feet long, 4 feet wide, 15 feet 3¾ inches high.

668 tubes, 3 inches diameter by ⅜ inch, metal water tubes, 11 feet 7¼ inches long. Size of connections 16 inches. $10,045 without depreciation; $9,845 with depreciation.

By Mr. KIRBY:

Q. Do you know when that was purchased?
A. 1904.
Q. And erected at that time?
A. Yes, sir.

Office building, total contents, furniture, etc., $2,000 no depreciation.

Meter house:

One 16 feet diameter station meter, $9,250, no depreciation.
One 13 feet 6 inches station meter, $6,350, no depreciation.
Q. I presume these have been installed some time?
A. The latter meter, 13 feet 6 inches, was just recently repaired and put in thorough condition.
Q. As was also the former?
A. I don't know when the former was last repaired, but it is in perfect condition.

1541 Q. And they are built in the same manner as you would have built them if you were installing them to-day for the purposes indicated?
A. Yes, sir.

Purifier house, two sets of four purifiers, 21 feet by 20 feet by 3 feet deep, three layers of trays for each box; size of connections 24 inches; two center seals, diameter 6 feet and 5 feet deep; two hydraulic lifts for purifier covers, constructed of steel, size 15 feet by 22 feet. Total price without depreciation $33,650, with depreciation $31,970.

Q. Have you any knowledge as to how long this purifier house has been in use?
A. About 25 years.
Q. Still you used a depreciation factor of but 5 per cent.?
A. Yes, sir, for the reasons stated before, that there is no depreciation except on the cover sides.
Q. And it is of the same construction as if you were building a purifier house for the purposes indicated to-day?

A. Yes, sir.

Lime house, total contents, $100, no depreciation.

Valve house and drip pump house, $30, no depreciation. That is the same in the other valve houses.

Mr. MATHEWSON: The next two drip houses are $30?

A. Yes, sir.

Q. And the next two $30 and $30?

A. Yes, sir.

Valve and drip pump house, $30, no depreciation.

One valve house, $30, no depreciation.

One valve house, $30, no depreciation.

The next is valve house, $10, no depreciation.

Valve house, $10, no depreciation.

Condenser and scrubber house, two 10 feet diameter by 24 feet high, scrubbers of wrought iron; two 24 feet 3 inches long by 5 feet 2 inches wide by 50 feet condensers, cast iron construction.

1542 Three vertical tubes inside of same. Wrought iron scrubbers, $4,420.

Cast iron condensers, $15,680.

Total, $20,100 without depreciation, $19,095 with depreciation.

Q. Do you know how long those scrubbers and condensers have been installed and in use?

A. About 25 years.

Q. Now the exhauster house?

A. Exhauster house one McKenzie exhauster No. 15, $1,865.

One Greenfield vertical engine, 9 inches by 9 inches, $475, total $2,340, no depreciation.

Tar separating system in yard. Tank constructed of wrought iron ¼-inch thick, 54 feet long 50 feet wide, eight compartments each 6 feet 6 inches. Eight ¾-inch tie rods with turn buckles, $2,250, no depreciation.

Q. They have been recently purchased, haven't they?

A. In 1904.

Pump pit:

Two Knowles pumps, one 6-inch by 7-inch by 12-inch, $223; one 8-inch by 10-inch by 12-inch, $265.

One Davidson pump, 8-inch by 4-inch by 12-inch, $215.

One Cameron pump, 4½-inch by 4-inch by 6-inch, $145.

Total, $848 without depreciation; $764 with depreciation.

Yard:

Three tar storage tanks, wrought iron, ¼-inch thick, 8 feet by 8 feet by 8 feet, $750 without depreciation; $675 with depreciation.

Yard below ground:

Twelve steel tanks, laid horizontally, 8 feet diameter, 40 feet long, with domes 30 inches by 36 inches, $16,267 without depreciation; $13,837 with depreciation.

1543 Q. What are those tanks used for, do you know?

A. Oil storage.

Q. There is practically no depreciation to them, is there?

A. Yes, sir, I figured 15 per cent.
Q. When were they put in?
A. 1887.
Q. What does the deterioration come from?
A. Oxidation from the outside.

Yard below ground:

Two oil storage tanks of steel laid horizontally, 8 feet diameter by 60 feet long with domes 30 inches by 36 inches, $3,848 without depreciation; $3,271 with depreciation.

Q. They were put in at the same time as the previous tanks?
A. 1887, yes, sir.

Another yard below ground:

One drip valve tank, 7 feet diameter, 25 feet long, $668 without depreciation; $602 with depreciation.

Coal shed:

Two hydraulic lifts with 10½-inch plunger, 24-inch diameter casing pipe, 24 feet long, platform 5 feet 6 inches by 7 feet, $4,200.
Two platform scales, 3 tons each, $300.
Total of the two items, $4,500; no depreciation.

Q. I note here, Continental Iron Work in parenthesis?
A. The lifts were built by them.

Yard:

Two hot scrubbers of steel, 21 feet high, 8 feet 6 inches diameter, $1,625; no depreciation.

Q. Do you know when these were placed in the works?
A. 1904.
Q. They did not cost that then, did they?
A. They did not cost this in 1904?
Q. Yes.
A. Yes, just about the same I should say.
Q. Was steel as high in 1904 as it is to-day?
A. There is a little bit difference, perhaps, in steel in favor of the present time, but the labor is higher, so as to offset the difference in saving of cost of material.

1544 Q. The cost of labor and material to-day would average about the same as it did two years ago for work of this character?
A. Very nearly, labor is a little bit higher.
Q. And material is a little bit less?
A. Material is a little bit less.

By Mr. MATHEWSON:

Q. You would not undertake to say exactly without investigation, would you, what the prices were in 1904?
A. No. Since 1903 the prices jumped so quick and varied so often that it is impossible to express a general opinion as to the exact value of material at that time.
Q. Without looking into it?
A. Without looking into it.

By Mr. KIRBY:

Q. Since 1903 have they always jumped in the same direction?

A. In 1903 we were not able to make an estimate from one day to the other unless we had confirmed prices by the various mills within twenty-four hours, the prices changed so quick that we were unable to make an estimate without getting the information specially.

Q. It is not so to-day, is it?

A. It is not quite so bad at the present time, but the tendency has been in the upward direction ever since the beginning of the year, for the price of steel.

Q. In making your estimates what prices did you use?

A. In which instance?

Q. For your present appraisal?

A. For steel plates——

Q. As of what date were all these prices?

A. To day's date.

Q. Do you mean the first of August, 1906?

A. Yes, sir.

1545 Mr. MATHEWSON: He does not ask you for the exact figure, he asks you as of what date.

Q. You have stated that the prices even this year have jumped considerably in both directions, and I asked you as of what date you based your estimates?

A. Well, say August 1st.

Q. That would be a fair mean for all the prices you have stated?

A. Yes, sir.

Q. And you consider that that would not be greater than the prices of 1903 or 1904 in most instances?

A. I stated that the prices in 1903 and 1904 varied so quickly in a short space of time that we were not even able to make an estimate from one 24 hours to the next 24 hours without having the prices confirmed by the mills.

Q. The market settled down so it was pretty stable in 1904, didn't it?

A. No, I would not call it stable. It was better than in 1903, but I would not call it stable. Prices were maintained at that time for a longer period of time than in 1903, but I should not consider them as being stable. I can give you the prices I estimated exactly.

Q. These scrubbers, were they put in in 1904?

A. Yes, sir.

Q. The Company paid a certain price for them at that time.

A. Yes, sir.

Q. With your knowledge of prices of 1904, would you consider they paid more or less than your estimate at that time without considering depreciation?

A. I said before that the prices for material were probably a little bit *higher*, but that the prices for labor at the present time are a little bit higher, so one offsets the other and there would be very little difference in cost.

Q. Would that answer be true for all classes of apparatus used in the gas works?

A. Yes, sir.

Q. So if you had made your appraisal in 1904 it would be
1546 approximately the same as it is to-day?

A. Yes, sir.

Q. Go on to the yard now.

A. Another item for yards, 2 hydrogen scrubbers, 8 feet in diameter 22 feet high, $1,560 without depreciation; $1,485 with depreciation.

Q. I notice in parenthesis here "Out of commission." What does that mean?

A. They are not used at the present time. There are a great many apparatus which are not used at the present time because the production of the amount of gas at the present time does not require it.

Mr. MATHEWSON: Summer production, that has been gone all over.

Q. Take the engine house.

A. Two Sturtevant horizontal engines, cylinder diameter 10 inches, stroke 12 inches, steam 3 inches, exhaust 4 inches, $2,045.

One Armington & Sims horizontal engine, cylinder 10 inches, 12 inches stroke, 3 inches steam, 4 inches exhaust, $1,225.

Each of the above engines have two 5 feet by 12 inches diameter wheels, speed about 300 revolutions to the minute. They are connected to three B. F. Sturtevant No. 10 gas blowers, 24-inch connections with 10 by 12 inches pulleys, speed about 1286 revolutions.

Value for blowers, $350. Two McKenzie No. 15 exhausters with 20-inch connections $1,650.

Two Greenfield vertical engines, 9 inches by 11 inches, $3,726.

Two Knowles pumps, 6 by 4 inches by 7 inches—I gave $350 for blowers. That is for the driving wheels of the engine and the $1,650 is for the blowers, and $3,726 is for the exhausters, and
$1,000 is for the Greenfield vertical engine. Now add $210
1547 for two Knowles pumps 6 inches by 4 inches by 7 inches, making a total in the engine house of $10,206, no depreciation.

Q. All of the contents of the engine house have been erected since 1900, haven't they?

A. Yes, sir, from 1900.

Q. And the prices you have given for engines, condensers, and the like in all instances are not merely the prices of apparatus, but the prices of apparatus set upon foundations?

A. Yes, sir, erected in place.

By Mr. MATHEWSON:

Q. That is so all through these schedules?

A. Yes, sir, erected upon foundations and placed.

By Mr. KIRBY:

Q. The foundation value, however, is not included in the apparatus but in the buildings?

A. All foundations are included in the buildings.

Q. We come now to the boiler house?

A. Boiler house:

Two batteries, B. & W. type boilers, Aultman & Taylor, Mansfield, Ohio.

Four boilers, 250 horse power each, total 1,000 horse power for two batteries, $18,750. They were erected in 1901.

Two batteries, 21 feet 9 inches deep by 19 feet 6 inches wide by 15 feet 8 inches long for each battery with a stack 5 feet diameter, 125 feet high, including the breeching, $2,386.

Mr. BURR: Are there four batteries all together?

The WITNESS: Yes, sir. All the following items refer to the boilers.

One Sturtevant steel plate boiler, 5-foot wheel, direct con-
1548 nected to double upright enclosed engines, cylinders above shaft; size of engine 2 feet 6 inches diameter cylinders 5 inches stroke, $1,250.

One Gould & Garrison 8 inches by 4½ inches by 8 inches engine, $175.

One Patterson & Berriman feed water heater, $265.

Total for all items in boiler house, without depreciation, $22,826. *No depreciation.*

Q. These small items of tubing, 108 4-inch diameter tubes are included in your appraisal?

A. For the boilers.

Q. Have you separated them?

A. Yes, sir.

Carbureter house used as pump house, and machine shop. Do you want that in detail?

Q. No, you need not give the detail.

A. Total value of pumps, $3,900 without depreciation, $3,510 with depreciation.

By Mr. MATHEWSON:

Q. That includes the contents of that house?

A. That includes the contents in that building.

By Mr. KIRBY:

Q. How do you figure your depreciation factor over that lot of machinery, did you take it for each one?

A. From my personal examination, yes, sir.

Q. You have only figured it on the total and not on each individual appraisal?

A. Well, I examined each and every one of them and in appearance they were all just about alike.

Q. So you used the depreciation factor on the total?

A. On the total for that house.

Pump house, total contents, $860 without depreciation, $820 with depreciation.

Q. You figured depreciation the same way there as in the
1549 other pump house?

A. The same way, yes, sir.

Retort house:

Eleven through benches of sixes back to back, $43,758.

Q. That is for 11 benches of sixes back to back?

A. Yes, sir. No depreciation. Now, these benches are just being rebuilt with all the new material on the ground.

Q. What have you figured on the new material that is on the ground?

A. No, I figured on the benches in complete condition. They are in a state of repair now, and will be finished before the fall.

Q. Is all the material there?

A. All the material is there.

Q. The labor is not there?

A. No.

Q. So you figured on labor which has, as yet, not been used?

A. I did in this instance.

Q. What proportion of the cost of those benches would be the labor as you figured it?

A. The total cost per bench would not be over $450 per bench.

Q. That would be how much for the benches?

A. $9,900.

Q. So you figure $9,900 in your total which is not there at this time?

A. It is not there at this time because the work has not been completed.

Q. Because the labor has not been performed?

A. Has not been performed.

Q. The material on the ground, it is worth its value as material?

A. Yes, sir, but it is being placed in position now.

Mr. MATHEWSON: The labor to produce them before has been on the ground and is a part. There is merely a substitution. The labor is there if they have ever been built.

Mr. KIRBY: Labor not as yet performed has not been there,
1550 and that he has figured as $9,900.

Mr. MATHEWSON: Labor has been performed in producing them originally, and this is merely replacement.

The WITNESS: It is replacement.

By Mr. MATHEWSON:

Q. Ordinary repairs in fact?

A. Yes, sir.

Mr. MATHEWSON: So the labor is there.

By Mr. KIRBY:

Q. In the retort house you found 11 benches back to back in course of construction, didn't you?

A. Yes, sir.

Q. On those certain work had been performed?

A. Yes, sir.

Q. And certain material was there?

A. Yes, sir.

Q. Now, the material and the labor complete would amount to the estimate you have given ,wouldn't it?
A. Yes, sir.
Q. The labor to be performed you have figured at $9,900, haven't you?
A. Yes, sir.

By Mr. MATHEWSON:

Q. It is in course of repair, isn't it?
A. Yes, sir. I want to state this is a repair, the same as any other instance where we put new settings in the brick arches. The arches are there and the iron-work is there, and they are merely putting in new material to get ready for the next season.

By Mr. KIRBY:

Q. But be it repairs or not, it is not there?
A. The labor is not there, but the material is there.

1551 By Mr. MATHEWSON:

Q. Is not the labor there which produced it originally?
A. For the original construction, yes, sir.

By Mr. KIRBY:

Q. Where is the original construction?
A. The same as this was before it was taken out.
Q. Where is it now?
A. It was torn down by the gas company.
Q. Where is the original construction, is it standing there?
A. No, but the money for building it has been expended.
Q. But the result is not there?
A. No.
Q. That for which the money was spent has been taken away?
A. Yes, to a certain extent, not all.
Q. How much is left?
A. The arches and iron work.
Q. You have figured those, haven't you?
A. Yes, sir.
Q. In your appraisal?
A. Yes, sir.
Q. So that is left you have given a value to and included in your appraisal, haven't you?
A. Yes, sir.
Q. And all that is there in the way of material you have included?
A. Yes, sir.
Q. And you have also included labor which is not there as yet, haven't you?
A. Yes, sir.
Q. And that labor is $9,900, isn't it?
A. Yes, on the repairs to the benches.

Mr. MATHEWSON: As a matter of fact, we lose so much capital every time we make repairs.

Mr. KIRBY: That is a question for argument.

Mr. MATHEWSON: It is a fact.

Mr. KIRBY: You cannot value a thing that you have not got.

Mr. MATHEWSON: He can have the labor that we put into
1552 it. You do not lose it when you come to repair it.

Mr. KIRBY: The legislature may give a certain amount for my services, but I haven't got it yet.

Q. We will go on with the next item.

A. The eleven empty arches should be erased from page 4 of description of apparatus, 99th Street station.

The MASTER: These are not even marked for identification, so it is useless to refer to them.

Mr. KIRBY: Under the circumstances I think it is all important that we read every item, if they are not exhibits in the case. In many instances we have taken lump sums for the whole contents of buildings, where the items have been less than one thousand dollars and there is no description whatever on the record what that apparatus is, unless these are in the case.

The MASTER: There has been no objection to having them marked for identification, and Mr. Mathewson wanted to put them in evidence. I suggested that they should be put in and the Senator thought, and Mr. Burr thought, and I supposed that you thought also, that it was better to have all these facts appear on the record in the examination of Mr. Mayer, and these typewritten memoranda were used simply for the purpose of convenience in questioning him. I suppose there is not the slightest objection to marking all of them for identification or even in evidence.

Mr. MATHEWSON: Not the slightest.

The MASTER: So do not raise a windmill and fight it. We have enough real trouble without it.

Mr. KIRBY: I do not see any real reason why they should
1553 not go in as the basis of Mr. Mayer's appraisal, but we certainly want an opportunity to cross-examine as to his values. We have not the apparatus here to measure, but we have the values to cross-examine him on.

Q. Go on with the accumulator house.

A. Accumulator house—do you want that in detail?

Q. Yes, give it in detail.

A. One accumulator, 20 feet high, 6 and 8 inches long, 3 feet wide, diameter of plunger 12 inches, length of plunger 12 feet, size of base, 6 feet 7½ inches by 3 feet, connections 4 inches; the plunger is counterweighted by cast-iron counterweights about 18-inch diameter.

The accumulator foundations consist of 12-inch I-beams, 16 feet long, set into building walls, $960; no depreciation.

One steel water tank, 10 feet diameter, 12 feet high, ¼-inch metal set upon four [illegible]-inch I-beams, 16 feet long, $351 without depreciation; $347 with depreciation.

One Davidson single pump, 14 by 8 by 14 inches, 6-inch suction 4 inches discharge, $390 without depreciation; $370 with depreciation.

Yard, wooden top tank, 24 feet diameter, full 2,000 gallons, $500 without depreciation; $375 with.

Filter press house, two Johnson filter presses, 15 by 2 feet 6 inches by 4 feet, $1,700, no depreciation.

One 10-ton Howe scale, $300, no depreciation.

Q. Those filter presses are recent construction?

A. Yes, sir.

Q. The same as in the other plants?

A. Yes. Miscellaneous tanks located in boiler house. Do you want that in detail?

Q. Yes, you better give them now.

A. One discharge tank 1¼ inches steel 4 feet by 3 feet by 4 feet.

1554 One boiler feed tank, ⅛-inch steel 6 feet 6 inches by 4 feet 6 inches by 9 feet 6 inches. Do you want those prices in detail?

Q. No, the total.

A. One overflow tank, ¼ inches steel, 5 by 7 feet 6 inches by 3 feet, one gas oil tank, ¼ inches steel 10 feet 4 inches diameter by 10 feet. One fuel oil tank, 3/16 inches steel, 1,500 gallons capacity. One gas oil tank, 10 feet diameter 10 feet high. Total for all tanks, $1,282 without depreciation; $1,155 with depreciation.

Coal, oil, oxide and shavings, not considered in appraisement. Do you want me to include this item (indicating), because that is referred to in your list and also in the addenda, or shall I leave it out?

By Mr. MATHEWSON:

Q. There is no use of giving that; say fire brick not included.

A. List of fire brick not included in valuation.

By Mr. KIRBY:

Q. How about retort house?

A. That is addenda. We had that before. Total for all apparatus without 10 per cent. engineering charges and 5 per cent. for interest charges, $268,177.

Q. Are there any buildings or apparatus in this plant or any other plant, besides those 11 benches in the retort house that we have been speaking of, that are in course of construction and on which you have figured labor that has not yet been performed?

A. No, sir.

Mr. MATHEWSON: These are not in course of construction. They are constructed and have been there a long time. They are merely in course of repair.

Mr. KIRBY: Call it what you may, they are not as yet finished.

Mr. MATHEWSON: That is another proposition.

1555 Q. You examined all this apparatus yourself?

A. I did.

Q. And went over all these buildings yourself?

A. I did, repeatedly.

Q. And you made no plan as to where the relative locations were between blocks 88 and 89th Street, East River and Second Avenue, did you?

A. No, sir, I did not; there was no necessity for it. I made my schedules as to the apparatus right on the site of the same and measured the distances between them for my connections, put that down and from that made my measurements.

Q. Did you lay a plan down for the location of this apparatus?

A. No, there was not time to do that and there was no necessity for it.

By Mr. PAGE:

Q. The 18th Street plant is not now in use as an operating plant?

A. No, sir.

Q. And the building and apparatus that you examined and testified to on your examination in chief are remnants of a manufacturing plant, are they not?

A. Yes, with the exception of the holders, valve house—some of the holders and valve houses which are now in use for the distribution of gas.

Q. What portion of this plant would it be necessary to retain as a distributing station in connection with the holders that are there?

A. I do not understand that question exactly.

Q. I understand that this is now used as a distributing station and there are some holders and you said it had a valve house?

A. Yes, valve house, several holders, boiler house and exhauster house.

Q. I say, how much of this apparatus that is left there is necessary to be used for a distributing station?

A. All of it.

Q. Do you want a 90-horse power boiler to run that gas holder and your valves?

A. Yes, sir.

1556 Q. Do you need a McKenzie exhauster?

A. Yes, that is a pump and comes from the other stations to fill the holders at this station.

Q. Then, all are the matters of apparatus which you have given, and about the value of which you have testified, apparatus that is actually in use for the purpose of distributing gas at that station?

A. Yes.

Q. Or is any of it what is left over from the manufacturing plant and not necessary for use in distribution?

A. All that is left now is required for the distribution. In my connections I have included only one single pipe from the exhausters to the holders; the rest are in some instances three and four pipes from the former plant, which have been included in my valuation.

Q. Now, you may give the valuation of the buildings at this place for the purpose of distribution.

A. Five frame sheds; total for the five sheds, $145 without depreciation; $73 with.

Engine, valve, and exhauster house, $5,678 without depreciation; $5,225 with depreciation.

Valve house, $1,523 without depreciation; $1,400 with depreciation.

Boiler house, $1,841 without; $1,693 with.

Stable, included in real estate schedule.

Shed, included in real estate schedule.

Dwelling, included in real estate schedule.

Wagon shed and paint shop, $1,020 without depreciation; $970 with.

Wagon shed, $1,322 without; $1,256 with.

Brick and brownstone building used as enclosure for holders, $169,328 without depreciation; $155,784 with depreciation.

Q. What do you mean by that, that the holders are put inside of a brownstone front or not?

A. Well, there it is, a large building in which are located two holders as a protection for the holders against snow and in-
1557 clement weather, and the man that has to go on top of the holder to clean it. It is an old construction that would not be carried out in these days.

Q. It is absolutely useless, is it?

A. No, it is not absolutely useless. The building is there and contains the holders, and the holders are distributing holders.

Q. Well, I say the building does not serve any purpose. You say a holder will last forever if left exposed to the elements. Then what necessity is there for enclosing it in a brownstone front?

A. I would not build it to-day, but it was built in the days when they considered it necessary to have a building around it to protect it.

Mr. MATHEWSON: And it is not necessarily a brownstone front, Senator.

Mr. PAGE: He says it is a brownstone front.

The WITNESS: No, brownstone—brown trimmings around the windows and things like that. In Chicago the holders were enclosed up to the year about 1880, in very large circular buildings, and it has only since 1880 been abandoned; the use of those holders there, and the weather was very severe.

By Mr. KIRBY:

Q. They do not enclose holders now where the climate is severe, do they?

A. Yes.

Q. All over the world except in Canada and in England?

A. None enclosed in England and none in Canada.

Q. None in Canada that you know of?

A. Yes.

Q. Old construction?

A. Yes.

Q. No new construction?
A. No, sir.

Mr. MATHEWSON: It depends upon the section; there are
1558 some sections still using them and erecting them.

By Mr. PAGE:

Q. If you were erecting this plant, which I understand the company wishes to have valued and for which purpose you have been retained to testify, as to what you could produce this plant for today, you would eliminate this brick and brownstone building from any such estimate, would you not?

A. If I was asked to make a valuation of that now? No, I should not eliminate it because it is there and represents the value that I have given it in my schedule. I have valued everything that I found on the premises that was in actual operation or use.

Q. Have you got anything more?

A. Coal storage yards between 18th Street and 19th Street, value of all timber, fence and retaining walls without depreciation, $1,502; with depreciation, $1,352.

Coal storage yard between 17th and 18th Streets, timbers, fences and retaining walls, $2,160 without depreciation, $1,944 with.

Brick walls in yard between 17th and 18th Streets, $1,960, no depreciation.

Timber, coal hoisting trestle, $4,160 without, $3,744 with depreciation.

Holder yard between 18th and 19th, brick retaining wall, $7,500. No depreciation. That makes a total for all buildings, $182,901.

Q. Now, you might give us the plant that is in those buildings?

A. Frame buildings in holder yard: There are two vertical boilers and one locomotive boiler which are of no value and can only be considered as scrap, and I have not valued them.

Engine house and valve-house:

One 20-inch McKenzie exhauster, $1,584, without, $1,505 with.

1559 One Greenfield engine, 8 by 10 inches, $440, without depreciation. $418 with.

Countershafting pulleys and belting, no depreciation, $80.

Three King's pressure gauges, $105, no depreciation.

One arch gauge, telephone booth, lockers, etc., $130, no depreciation.

One building containing pressure gauges; total amount $167, no depreciation.

Boiler house:

One horizontal tubular boiler, 90-horse-power 8 feet diameter, 15 feet 6 inches long; 2 feet diameter by 30 feet stack, total value without depreciation, $1,973; with depreciation, $1,815.

One small Worthington duplex pump, 4½ by 2¾ by 4, $60 without depreciation, $57 with.

Pressure gauges, water columns, etc., $25, no depreciation.

Lockers, $50, no depreciation.

Stable:

Twelve stalls, $250, no depreciation.

One box stall and lockers, $60, no depreciation.

Coal storage yard, trestle work consisting of A frame posts 40 feet high and A frame posts 50 feet high, each frame rests on two piles and 3-inch plank flooring over entire area; construction of A frame post consists of seven 50 feet posts made up of 12 inches by 12 inches diameter 50 feet long, and seven posts 40 feet high for coal carrier. The total value is $10,396 without depreciation, and $9,357 with depreciation.

Q. What is the storage capacity of that?

A. I could not tell you, that depends on the height to which they fill it. They have got six coal trestles with buckets running across the entire yard, and those buckets are nearly at an elevation of about 35 to 40 feet I should say.

1560 Q. How large is the yard? Or, in other words, that coal storage is large enough for the storage of the coal that is used in the gas works when it is in operation, is it not?

A. Yes, and I should say it would not be less than—probably operated to full capacity—I should say two and one half months' capacity. I can give you the lineal dimensions of the whole building that forms the coal storage, but I did not figure the planking; I took it all out because it was all rotten, so I did not figure that, but I can give you all the lengths.

Q. Is it used now for coal storage?

A. It can be used at any time.

Q. Oh, I know that, of course, you can pile coal on a vacant lot for that matter.

A. All the machinery is there.

Q. But the question is, is it used?

A. It was not used for such purpose when I examined the plant.

Mr. MATHEWSON: He did not give the total of that apparatus.

Q. That was what I was going to ask him. What value do you put on the apparatus?

A. $14,019 total value of apparatus at 18th Street station.

Q. The total value of this plant excluding the holders at the 18th Street station is $192,920, is it?

A. No, sir; it is $218,907, excluding the holders and excluding the ten per cent. for engineer charges and five per cent. interest charges. We have not yet accounted for or placed any value on the pipe connections.

Q. Well, you may value those pipe connections.

Mr. MATHEWSON: He stated that already, what they were, in detail, and their value.

The WITNESS: Yes, I gave it once before.

1561 Q. For some purpose, there was a question on direct examination, to mentally reconstruct these works and value them as reconstructed, and in doing so I believe you used the unit of $340 per thousand cubic feet of capacity?

A. That is right, sir.

Q. And you stated that the reason you did that was because these

works were owned originally by the same company that owned the 14th Street works and you thought that the same unit should be applied; is that right?

A. I did not say I thought they were owned by the same company.

Q. Didn't you?

A. I said that they were conducted along the same lines, with some considerable improvements at the 18th Street over the 14th Street on account of iron coal hoppers located alongside of the iron retort house, iron structures.

Q. Did you state that on your direct examination what you are now stating?

A. I think I did, to my best recollection.

—. On page 1,381 of the testimony you were asked this question: "Q. Do you know that the 14th Street plant and the 18th Street plant were the property of the same company when the consolidation took place in 1884, do you? A. Yes.

Q. Did you observe, as far as you were able to observe, any difference in the character of the plant so far as the cost of plants were concerned? You say you took the same figures? A. It was practically the same plant as 14th Street."

A. Yes, now if you will read a little bit further I think you will find I made that other statement.

Mr. MATHEWSON: Either to Mr. Kirby or to me he did; there is no doubt about that.

Mr. PAGE: Yes, here it is on page 1,382.

1562 Q. The unit that you found by dividing the capacity on the 14th Street plant by the value that you gave excluding the holders, would be $327 and a fraction?

A. Yes, about $327.

Q. $327.18, I figured it.

A. Yes.

Q. And for the increased coal facilities you added $13 to each unit of capacity?

A. No, sir, not for that reason.

Q. Well, for what reason did you do that?

A. Because the 42nd Street plant, which was a 4½ million capacity figured up to $330, indicating that the smaller the plant is the higher the unit must be in the same proportion; 14th Street, being a five-million foot plant, and 42nd Street being a 4½ million feet, and 18th Street in its original condition only being 3½ million, the same ratio of increase in that unit would be $340.

Q. The figure that you have taken has been arrived at by a comparison of those particular plants, the 42nd and the 14th Street plants, dividing the value by capacity?

A. Yes, sir.

Q. It has not been based upon your experience as an engineer, as to what a coal gas plant should be valued at per unit of capacity?

A. Yes, it has. The valuation of the 14th Street and 42nd Street at $327 and at $330 is just about the amount that works of that

sine cost to-day, and then I figured them and found that these prices were obtained, and I felt sure that that was about right.

Q. Then, as I understand it, a modern up to date coal plant with all the improvements that have been devised since these plants were built would be worth the same rate per unit of capacity?

A. Yes, as far as they refer to plants constructed in this country.

Q. Certainly, plants constructed in this country.

A. That makes a big difference.

1563 Q. Oh, yes, I suppose it does. You have built a number of plants in Canada, have you?

A. Yes, sir.

Q. And you have built them in Havana?

A. Yes.

Q. And what unit did you use in Canada?

Mr. MATHEWSON: I object to that as immaterial. The conditions are not shown to be at all similar. If we get into matters of comparison and one thing and another we will never reach an end if we start in this way.

The MASTER: I will allow it.

Exception taken by Mr. Mathewson.

A. In the instance of Canada it was a water gas plant, and could not be compared with this at all.

Q. You have never built any coal gas plants in Canada?

A. No, and in the instance of Havana it could not be compared, because climatic conditions are such that they require entirely different conditions from what they do in this country.

Q. Where else have you built coal gas plants in the eastern part of the United States, except in the city?

A. The Kings County plant was a coal gas plant in its first construction.

Q. How long ago was that?

A. 1899, that was the last coal gas plant.

Q. What was the capacity of that plant?

A. At that time it was a million and a half, with buildings arranged for duplication, arranged for three million of coal gas and one and one-half millions of water gas, if I remember correctly.

Q. Its capacity as you constructed it was one and one-half millions?

A. With the buildings arranged for three millions.

Q. What unit of capacity did you figure that on?

A. I have not figured that at all. That would not apply in this case because the apparatus was not the full capacity of the buildings. I just know from my engineering knowledge that the

1564 coal gas plant averaged about that price per thousand feet of producing capacity.

Q. You have stated that the unit of capacity of a 3,500,000 cubic feet plant is $340, the unit of a 4,500,000 plant is $330, and the unit of a 5,000,000 plant is $327?

A. Yes, sir.

Q. Now, does it progress in equal ratio? What would be the unit of a 9,500,000 coal gas plant?

A. No. There would be a change in ratio when you would get above or below a certain capacity.

Q. What is that capacity where the unit becomes at its lowest and then begins to increase?

A. This ratio I have applied would probably be correct for works from 3,000,000 to 5,000,000 feet per day.

Q. Which ratio? You applied more than one here.

A. Well, the ratio between those three.

Q. Now, what is it between 5,000,000 and 6,000,000?

A. Between 5,000,000 and 6,000,000 would probably be in the neighborhood of $315. Where you advance a little below the capacity of 3,000,000 you would probably run up to the neighborhood of $375 to $400. When you get to the small sized plants it increases very fast.

Q. We are dealing in large plants, though here. Now, haven't you a regular table which you use in estimating the value of plants per unit capacity?

A. No, sir, and such a table cannot be made. There are sufficient differences in the various plants in the details of construction so that the table would be of no value except a total average for the entire value of the plant.

Q. Where does the ratio become stationary before it rises again? You say that it rises after a while as the plant gets larger. Take the seven million daily capacity, what would that be? Figure on that?

A. I don't say that the ratio becomes stationary. It is changing continuously but the rate of change alters. The rate of change is not the same.

1565 Q. Well, give us what you estimate a 7,000,000 cubic foot daily capacity coal gas plant at?

A. You mean under conditions as built here now without any of the latest apparatus for purification?

Q. No, I want an up-to-date plant. You would not build anything but an up-to-date plant to-day, would you?

A. Well, I made the remark before that there is a difference between this and other countries as to up-to-date plants.

Q. Take this country.

A. It is a common thing in this country to include those things in an up-to-date plant. Purification and bi-product plants depend upon the development of chemical industries in this country and when we have them we have to build our plants as in Europe and they run up to $400 easily.

Q. Which is $400, the plant in Europe where they have cyanide bi-product recovery?

A. Yes, sir.

Q. And certain other bi-product recoveries which we do not recover in this country?

A. At present.

Q. Let us eliminate the things obtained in Europe which do not obtain here, and give us an up-to-date American plant as you would build it in this country.

A. Without the differences I mentioned just now, for 7,000,000 capacity?

Q. Yes, do not put in anything you would not put in in this country.

A. I cannot give you that exactly. Those are approximate values. There is no fixed basis upon which you can value that except by comparing with these other plants. I cannot estimate the plants in a moment off hand. Here are positive data which I figured in detail and that is as good a comparison as you can get; there are absolute facts.

Q. Well, give us ten million?

A. I cannot do it offhand.

Q. Why not?

A. Because I cannot. I will have to refer to some figures.

1566 Q. Didn't you figure the capacity of the horizontal retort unit, as you might call it, at Astoria, and isn't that a ten million cubic foot daily capacity?

A. That would only be a portion of the plant. The retort unit would be a portion of the plant.

Q. I say did you figure on nothing but the retorts over there? Did you figure on the entire plant?

A. No, I did not.

Mr. MATHEWSON: Oh, no, a very small part of it.

The WITNESS: These comparisons cannot be easily made.

Q. You have nothing by which you could make such a comparison?

A. Oh, yes, lots of it.

Q. Well, value it?

A. You have got to give me time to investigate my figures and refer to my records. I cannot do it now. I believe I have more figures of the cost of coal gas plants than any other engineer in this country.

Q. But you never before figured on this per unit of capacity with the value of plant?

A. Oh, very frequently, after comparing in a general manner, and the plants vary from $350 to $400; others about $325. It depends on the details of construction; one costs a little more than another; but here is an absolute comparison between plants similar in construction, and you could not get a better basis of comparison than those I have applied here.

Q. Have you sometimes figured as low as $300 for a limited capacity?

A. Well, I do not figure it at all except for general comparison. I do not believe any coal gas plant can be built for $300. I don't think any of them would be less than $330 or $340 or $350 in capacities of from three million to five million.

1567 Q. It would cost less per unit of capacity to build one coal gas plant that would produce 9,500,000 cubic feet, wouldn't it, than it would to add together these two, 14th Street and 42d Street?

A. Oh, yes. You mean in one plant?

Q. Yes.

A. Yes, sir.

Q. How much less per unit of capacity?

A. I cannot give you that information unless you give me time to look over my figures. It is impossible to give that at a moment's notice.

Q. Well, can you give it approximately?

A. It would depend on the details of construction. They may vary from $350 to $400. It depends on what the plant contains.

Q. You have been building gas plants in your mind right along. Supposing you build one in your mind that would produce 9,500,000 daily capacity?

A. No, I would not say that offhand. I am not accustomed to give figures that way. From an engineer's standpoint it is necessary to refer to records and data to be correct, and I do that in all my calculations, and I won't give any offhand figures.

Q. You gave as a unit of value for a water gas plant $123 per unit of capacity, excluding holders?

A. Yes, sir.

Q. Is that subject to the same fluctuations and limitations as the figures on the coal gas?

A. Not as much, for the reason that there is not as much difference in the apparatus and value of the apparatus; secondly, there is not the same chance for the same variation as there would be in a coal gas plant.

Q. Then you think that would be a fair unit to assume on the value of the water gas plant, no matter what the capacity might be?

A. Yes, I think that is right.

By Mr. MATHEWSON:

Q. That is excluding the holders?

A. Yes, sir.

1568 By Mr. PAGE:

Q. All these figures are exclusive of holders?

A. Yes, sir.

Q. There seems to be something of a fluctuation in the value you have given of your three water gas plants here: The 44th Street plant would seem to be $114 per unit of capacity, the 99th Street plant, $119.50, and the 21st Street plant $125.

Mr. MATHEWSON: $123, isn't it?

The WITNESS: Wouldn't that be $124 instead of $114 in 44th Street?

Q. Well, will you give what is right, if that is not right?

A. Well, I make it $124, not $114.

By Mr. MATHEWSON:

Q. For what?

A. For the 44th Street plant.

By Mr. PAGE:

Q. And $120 for the 99th Street?

A. $120, yes, sir.

By Mr. MATHEWSON:

Q. How much for the 21st Street plant?
A. $123.

By Mr. PAGE:

Q. What did you give as the total value of the plant without holders? The entire plant you have got there, haven't you?
A. Which plant?
Q. All of them. Haven't you got it in one sum?
A. All the plants, yes, sir. The total value of all the plants is $11,991,404, without holders.

By Mr. MATHEWSON:

Q. Does that include everything but the holders?
1569 A. That includes everything except the holders, and the original 18th Street plant.

By Mr. PAGE:

Q. It would be possible, would it not, to construct as one works, a coal gas plant, that would produce 9,500,000 cubic feet to-day?
A. Oh, yes, sir.
Q. And a water gas plant that would produce 41,500,000 cubic feet per day, wouldn't it?
A. Yes, sir.
Q. And if you construct a coal gas plant of 9,500,000 cubic feet per day it would be proper and it would be ample allowance, wouldn't it, to multiply that by $3.15 for instance of capacity?
A. That is a unit of $3.15 per thousand cubic feet.
Q. Yes, that ought to give you——
A. $3.15?
Q. Yes, $3.15.
A. No, sir.
Q. What figure would you use?
A. Well, I said before I could not tell. It depends largely upon local conditions. You cannot average that.
Q. Well, it would not be more than $3.27, would it? That is what would produce a five million capacity—it certainly would not be more than that?
A. You mean $3.27 or $327?
Q. Oh, $327. I mean, for a 9,500,000.
A. On the valuation of plants of large size in that matter I would prefer not to make any positive statement until I can examine my records of cost. Cost of larger sized apparatus in proportion to the capacity is of smaller cost than smaller sized apparatus, and I would not like to state off hand what that would amount to and the total cost unless I examined my records.

By Mr. MATHEWSON:

Q. Did you not have to have some special construction for
1570 such a plant which would be more costly than the standard construction?

A. I said before it would depend upon the local conditions. It is very bad to compare one plant with another which is not of the same detail of construction. Here I have made values of the same detail of construction and you could not get a better comparison then as I have made here.

By Mr. PAGE:

Q. If you were called upon to construct a plant for the use of the Consolidated Gas Company, to-day, would you scatter the works around as they are here?

A. No, sir, I certainly would not.

Q. The works divided into five manufacturing stations require a much larger investment in plant, do they not, than it would to bring them together into one station?

A. Decidedly.

Q. And also the cost of operation is very much more in the scattered stations than it would be in the one station?

A. Yes, sir.

Mr. MATHEWSON: This witness has not operated plants. I don't think he should be asked that.

Mr. PAGE: He may know more about it than some people who have operated plants.

Mr. MATHEWSON: Possibly, but he may not know as much about it as some who have operated plants.

Q. Now, you may give the values of whatever apparatus and buildings are in the different distributing stations. The first is 63d Street?

A. It is divided in the same manner, building, connections, apparatus and holders.

Mr. MATHEWSON: He has described the buildings already.

1571 Q. Give it in the same way as you gave it in the operating stations.

A. Engine room, total value of buildings $1,023. No depreciation.

Valve house, $870. No depreciation.

Boiler house, $960. No depreciation.

Brick walls around property, $8,576. No depreciation.

Total value of all buildings, $11,429.

Engine room:

One 30 horse-power Morris engine, 10 by 18, reversible, without depreciation $1,430; with depreciation $1,287.

One Sturtevant exhauster with steam and exhaust connections, countershafts and pulleys and gauges, without depreciation $750; with depreciation $735.

Valve house:

One photometer, $650, no depreciation.

Boiler house:

One 66-inch by 16 feet Continental Iron Works boiler, $1,250 without depreciation; $1,125 with depreciation.

One Simplex Blake pump, 10 inches by 6 inches, $350 without depreciation; $340 with depreciation.

One Metropolitan injector with pressure gauges, pipe connections and firing tools, $45, no depreciation.

In the yard:

One duplex pump 12 by 6 inches $330 without depreciation; $314 with depreciation.

One drip water tank with 2-inch pipe connections, $350 without depreciation; $332 with depreciation.

Total of all apparatus, $4,828.

Q. You may give the value of the connections.

A. Twenty-four to thirty-inch pipe, $6,960, no depreciation. That is cast iron pipe.

1½-inch and 2-inch iron pipe, $18. No depreciation.

1572 24-inch and 30-inch valves, $909.

Total for all connections, $7,887.

Q. There is one holder there is there?

A. Yes, sir, one holder.

By Mr. MATHEWSON:

Q. And that you already valued?

A. 3,000,000 cubic feet capacity, yes, sir.

The steel work for the entire structure is $152,355.

The retaining wall, $11,090.

The brick tank constructed in rock, $256,922.

Making a total for the holder of $420,367.

Q. Describe the holder?

A. The holder is constructed in three lifts with an outer section of 184 feet in diameter; the guide frame consists of 24 steel standards, 122 feet in height. The tank is supplied with two 30-inch connections, that is, one inlet and one outlet.

Q. And you estimate the price at 7.1 cents per pound?

A. Yes, sir. It includes a permanent timber frame for the support of the crown of the holder, based upon the weight of the steel.

By Mr. KIRBY:

Q. The tank erected in 1899 and weighs——

A. The tank was erected in 1899 and weighs 2,258,759 pounds. That is all for that station.

Q. What pressure is there on this holder?

A. Nine inches when totally inflated, all sections.

Q. When all sections are cupped?

A. Yes, sir.

By Mr. PAGE:

Q. Now, take the 65th Street. You have described the buildings already; just give us the values now.

A. Engine and valve house, $2,688 without depreciation; $2,016 with depreciation.

1573 Exhauster house, $12,350 without depreciation; $11,732 with depreciation.

Boiler house, $3,058 without depreciation; $2,906 with depreciation.

Boiler house extension, $896 without depreciation; $852 with depreciation.

All walls around the property bounded by Amsterdam and West End Avenues, 65th and 66th Streets.

By Mr. MATHEWSON:

Q. You have given the total feet and about the average height?

A. Yes, sir, I gave the sections of walls already, $33,677.

By Mr. PAGE:

Q. And those were erected in 1866, were they? I mean the buildings?

A. That one building was, I don't know about the others.

By Mr. MATHEWSON:

Q. What building?

A. The first building, engine and valve house. I suppose there was a portion of those walls erected at that time, and a large portion of it later as they extended the plant. That makes a total value of buildings of $51,183.

The WITNESS: Apparatus in engine and valve house. One Beam, engine, 6 inches by 18 inches with steam and exhaust piping, $400 without depreciation; $340 with depreciation.

In the exhauster house, one 12-inch by 12-inch Rowland vertical engine, with steam and exhaust piping, $1,115.

One 30-inch McKenzie exhauster, with gauges and connections, $1,738, making a total of $2,853 for the two items without depreciation; $2,796 with.

1574 One photometer, furniture and plumbing, $1,150 without depreciation; $1,000 with depreciation.

Boiler house, two horizontal tubular boilers, 48 inches by 10 feet, $2,566.

One horizontal tubular boiler, 48 inches by 12 feet, in brick settings, $1,370, making a total for the two items of $3,936 without depreciation; $3,740 with depreciation.

One No. 2 Niagara feed pump, $60 without depreciation; $57 with depreciation.

One No. 4 Korting injector, $40 without depreciation; $38 with depreciation.

One steel stack with connections, $180 without depreciation; $171 with depreciation.

Boiler house extension, 66 inches by 14 feet tubular inside firebox boiler complete, $2,078 without depreciation; $1,975 with depreciation.

One No. 5 Korting injector, $45 without depreciation; $42 with depreciation.
Total value of all apparatus, $10,159.
Connections, 16 and 30-inch cast-iron, $12,528; no depreciation.
One 1½ and 2-inch wrought iron pipes, $128; no depreciation.
30-inch valves, $3,427.
16-inch valves, $244.
Total of all valves and connections, $20,406.

By Mr. PAGE:

Q. Do you take a unit of value for your pipes and valves, as you did in the other apparatus?
A. The valves are all estimated in detail, so much apiece, according to the size of same.
Q. How about the pipe?
A. And the pipe is figured at the unit of value depending upon the diameter for same, for cast-iron and for steel pipe.
Q. At what price per ton did you charge for this cast-iron
1575 pipe?
A. $116, which includes the placing in position.
Q. That is the pipe laid in the yard?
A. Pipe laid in the works.
Q. Well, in the works, yes.
A. Yes.
Q. How deep do you have to lay those pipes in the works?
A. Depending upon local conditions, but in order to cover—well sometimes they are very close to the surface of the works and sometimes four or five feet down. It depends upon the drainage required for them to avoid drips. You cannot compare it with the laying of pipes in the streets, because it is an entirely different proposition.

By Mr. MATHEWSON:

Q. These are flanged pipes in the exhauster house?
A. In the buildings they are all flanged, and outside they are hub and spigot pipes. Holders——

Mr. MATHEWSON: Let us see what they want about that.

By Mr. PAGE:

Q. How many holders are there in this property?
A. Altogether eight holders.
Q. Take the 325,000 feet capacity holder. What is the diameter of the tank?
A. Of the tank or holder?
Q. Of the tank.
A. 94 feet diameter, 26 feet deep.

By Mr. KIRBY:

Q. That is a brick tank?
A. A brick tank. All these holders are brick tanks.

By Mr. PAGE:

Q. What is the diameter of the holder?

1576 A. The outer section is 92 feet 6 inches. The holder has two lifts and a guide frame consisting of eight wrought iron columns with cast iron tops and bases. The in and outlet pipe has 20-inch connections, wrought iron pipes.

By Mr. KIRBY:

Q. What is the thickness of the shell?
A. Of the holder?
Q. Yes.
A. No. 14 and 13.

By Mr. PAGE:

Q. What is the total height of the holder?
A. Well, it is about 50 feet when inflated. Pressure 4.8 inches when fully inflated.
Q. Now, take the two holders of 4,000,000 capacity. Will you give me——
A. Two holders of 4,000,000 cubic feet capacity, outer section 184 feet 6 inches in diameter. Holder has a guide frame of twenty steel standards 167 feet high and the pipes to the tank 36 inches in diameter. Pressure of one 12.5 inches and of the other 13.4 inches when fully inflated.

Brick tank, 187 feet in diameter, 43 feet 6 inches deep. 65 per cent. of the tank excavated in rock.

Q. Have you given the value of the holders and tanks separately?
A. Yes. Do you want the value of the holders?

By Mr. KIRBY:

Q. Give the value of the two holders of 325,000 cubic feet capacity?
A. The value of the two holders of 325,000 cubic feet capacity for the steelwork is $55,481.
Q. And the value of the tanks?
A. The tanks are the same size and I have them all together, the whole six.

1577 Q. And the value of the four holders?

A. The value of the four holders of the same capacity is $100,920, and the two 4,000,000 foot holders are $398,645.

Q. That is with depreciation?
A. Yes, sir.
Q. In each instance?
A. Yes, sir.
Q. There being no depreciation for the two large holders, but a 3 per cent. depreciation factor for the small holders?
A. Yes, sir. Now, the six brick tanks for the smaller holders had a value of $177,547 with no depreciation, and the brick tanks for the large holders have a value of $480,280 with no depreciation.
Q. Making a total value of holders and tanks of how much?
A. $1,212,873.

By Mr. MATHEWSON:

Q. Exclusive of the engineering expenses and interest?

A. Yes, but in the instance of holder stations, the engineering charge and the other items referred to under that heading have been reduced to 5 per cent. from 10 per cent.

Q. So you stated in your testimony the other day?

A. I believe I did state it.

By Mr. KIRBY:

Q. But the value of the holders and tanks is $1,212,873, and not the holders themselves, as is stated in the testimony, page 1386?

A. Did I state it so?

Q. The question is "What is the value of those holders? A. $1,212,873."

A. It is quite possible I did state it so, because when we speak of holders from an engineering standpoint we include the holder with the tank because the holder is not complete without the tank.

Q. Take the 111th Street station.

1578 A. 111th Street, office, $5,974 without depreciation, $5,675 with depreciation.

Exhauster house, $26,127; no depreciation.

Boiler house, $4,167; no depreciation.

Hoisting engine house, $171 without depreciation; $163 with depreciation.

Scale house, $702; no depreciation.

Stable, $11,607 without depreciation; $10,447 with depreciation.

Boiler coal storage, $583; no depreciation.

Generator house, $18,307 without depreciation; $9,154 with depreciation.

Q. How did you come to use such a large percentage of depreciation?

A. Why, that house was in bad condition and it would have required just that amount to fix it up and put it in proper condition.

Q. Do you know when that generator house was erected?

A. No, I do not, but it requires an entire new roof to put it in good condition.

Q. The office building was erected in 1871, wasn't it?

A. No, that is the scale house. Yes, 1871.

Q. And the exhauster house in 1902?

A. Yes, sir. That is entirely new.

Q. And the boiler house in 1902?

A. Yes, sir, entirely new.

Q. And the scale house about 1871?

A. Yes, sir.

Q. And the time of erection of the other buildings you have no knowledge?

A. I have not.

Wooden tool shed, $2,809 without depreciation; $2,528 with.

Retort house, $50,499 without depreciation; $37,874 with depreciation.

Foundation for old oil tanks, $4,491; no depreciation.

Blacksmith's shop, $3,006 without depreciation; $2,946 with depreciation.

All fences, $702 without depreciation.

1579 Fences around holders, $1,026 without depreciation; $923 with depreciation.

Fence around old works, 900 without depreciation; $810 with depreciation.

Brick walls on First Avenue, $703 without depreciation, $689 with depreciation.

Making a total value for the buildings of $107,981.

Now, the apparatus. Contents of office building $2,500 without depreciation; $2,125 with depreciation.

Exhauster house:

Forty-two valve stands, $651 without depreciation; $636 with depreciation.

Two number 11 vertical Root's exhausters, $5,870; no depreciation.

Two 16-inch by 16-inch Payne reversible motion engines, $3,600; no depreciation.

Two 36-inch Connelley gas governors, $4,500.

One Cochrane feed water heater, $345; no depreciation.

Steam exhaust, gauge piping, gauges, plumbing, piping, steam heating, radiators and piping, $1,610; no depreciation.

One Photometer, four closets, one toilet and wash basin, $805; no depreciation.

By Mr. KIRBY:

Q. Is all that apparatus in use to-day?

A. That is perfectly new. All been erected in 1902.

Q. And is now being used?

A. Yes, and these were all figured in detail, all of these items.

Boiler house:

One guide steel stack, 4 feet diameter, 64 feet 8 inches high, $507; no depreciation.

Breech for stack, $157; no depreciation.

Three boilers, 66 inches by 16 feet, horizontal return tubular, 90 tubes each, 3 inches diameter by 16 feet long, brick setting,

1580 $5,432, no depreciation.

One Knowles pump 6 by 4 by 7 inches, $105, no depreciation.

One 1½-inch Hancock inspirator, $65, no depreciation.

Hoisting engine house:

One Ledgerwood hoisting engine, double cylinder, 8¼ by 10 inches, $1,125, no depreciation.

Scale house:

One 10-ton Fairbank wagon scale, $205 without depreciation, $195 with.

Stable:

Stable fittings and appliances, 32 stalls, office furniture and feed racks, $1,300 without depreciation, $1,105 with.

Tool shed:

Lockers, 4-beam engines not in use, one lathe and toolbins, $1,975 without depreciation, $1,778 with.

Retort house:

One stack, 16 benches, six retorts, each retort 20 feet long, $70,720 without depreciation, $53,040 with depreciation.

One stack of five benches, of five retorts, each retort 20 feet long, $20,000 without depreciation, $14,000 with depreciation.

Q. Are those retorts in use to-day?

A. They were not when I examined the plant, no, sir. It is an old coal gas works near the river side.

Q. Were they being used?

A. Not when I examined the plant, but these benches were all new, had just been rebuilt, I don't know when.

Q. Still you crossed 25 per cent. off for depreciation?

A. The arches were old and the ironwork was old. These benches can be operated at any time.

Q. But they were not being operated?

1581 A. Not when I examined the plant. They were all ready to be fired, but I don't think they had a fire in them.

By Mr. PAGE:

Q. And you don't think they had a fire in them for a number of years, do you?

A. I don't think that they did.

Q. You know as a fact that this plant is not used as an operating plant by the Consolidated Gas Company?

A. Yes, sir, it is used as an operating plant.

By Mr. MATHEWSON:

Q. You mean as a manufacturing plant?

A. I mean as a manufacturing plant, yes, sir.

By Mr. PAGE:

Q. But it could be operated if necessary?

A. Yes, sir, at any time.

Q. What is the capacity of the plant?

A. In these benches could be produced a total of 2,420,000 cubic feet of coal gas.

Q. Very well, you may proceed.

A.—

Blacksmith shop:

Various forges and tools, $350; no depreciation.

Yard:

Oil tank, 43 feet diameter by 20 feet deep, ¼-inch plates, $3,105 without depreciation, $1,652 with depreciation.

Atmospheric condenser, cast iron pipes 20 inches diameter in ten sections, $5,926 without depreciation, $4,444 with depreciation.

Q. Is there any further apparatus?

A. No, sir, that is all.

Q. There is no purifying apparatus, is there, for this plant?

A. No, sir, nothing of any kind. The gas would have to be purified at some other station.

Q. What else is there that would have to be cared for at
1582 some other station?

A. Everything except one condenser, one atmospheric condenser.

Q. Then this plant could not be operated, could it, as a manufacturing plant?

A. Except with some other plant. Not by itself, no.

Q. How could you operate it with some other plant?

A. By pumping the gas to some other station and purifying and condensing it there.

Q. That is pumping it as it comes from the benches?

A. Yes, sir.

Q. Would that be a practical operation?

A. No, it would answer in a case of necessity only.

Q. Then, as a matter of fact, these are abandoned works, aren't they, and dismantled, aren't they, partially?

A. Practically, yes.

Q. What is the total value of the apparatus that would be applied to gas making at this particular station as separated from that which would be retained, treating this as a distributing station?

Mr. MATHEWSON: You asked him how much would not be used as a distributing station?

Mr. PAGE: Yes.

A. $74,914, with depreciation.

Q. That is the apparatus?

A. That is the apparatus.

Q. Now, what buildings could you do away with, as this is to be used as a distributing station merely?

A. The generator house and retort house.

Q. What figure did you value those at in this appraisal?

A. $47,028, including depreciation.

By Mr. MATHEWSON:

Q. What then would be the total valuation of the buildings which you say would not be used, and the apparatus which would not be used as a manufacturing plant at 111th Street, together, $121,941.

1583 By Mr. KIRBY:

Q. You have got some connections here?

A. Pipe connections 24-inch and 36-inch cast iron——

Mr. MATHEWSON: That is already on the record.

The MASTER: Yes, and the valuation of it.

Mr. KIRBY: He has the total, I think, but not the items.

Mr. MATHEWSON: Well, there are only three or four items.

The WITNESS: $15,950, no depreciation; 1½ to four inches, diameter, wrought iron pipes, $528, no depreciation.

All valves, $10,590. Making a total for valves and connections, $27,068.

By Mr. PAGE:

Q. Why do you have forty-one valves of 36 inches diameter?

A. They are located in the valve house and exhauster house. The gas is pumped from various stations and distributed into the new five million foot holders and there are an enormous number of large valves and connections required in this building.

Q. They are all in use?

A. They are new and in use. I have included no connections that are not in use.

Q. How about connections running from this old abandoned retort house? Are any of those included?

A. There are none included because there are no exhausters to take the gas away from that retort house. There is no other plant to which there is any connection.

Q. Go on with the holders?

A. Two holders, five million feet capacity each, with steel
1584 tanks, capacity when fully inflated 14 inches. Outer section 190 feet in diameter.

Steel tank 192 feet, 9 inches in diameter.

Total height of guide frame, 192 feet. In and outlet pipes to tank, 36 inches in diameter. Total value $611,891. No depreciation.

Concrete foundation, 201 feet in diameter, 24 inches deep, for above tank, $92,846. No depreciation.

Making a total for the two holders of $704,737.

By Mr. MATHEWSON:

Q. Senator Page was not here the other afternoon when you testified that on these holder stations you allowed an engineering expense of five per cent. only instead of ten per cent.?

A. Yes.

Q. And the interest item of five per cent.?

A. Yes, sir.

Q. And of course neither of those are included in the value you have now given?

A. No.

By Mr. PAGE:

Q. Did you give the pressure?

A. I gave it as fourteen inches.

By Mr. MATHEWSON:

Q. When fully inflated?

A. When fully inflated.

By Mr. PAGE:

Q. Now that pressure, do you mean that, that it is only fourteen inches when fully inflated?

A. Yes, sir, this is rather a large diameter; therefore the pressure is less as compared with holders of smaller diameter having considerable depth.

Q. Proceed.

1585 Mr. MATHEWSON: Take up the 132d Street station.

132nd Street Station:

Governor and boiler house, $26,736. No depreciation.

Q. The building has just been erected?

A. Newly been erected. I figured that in detail and my price was less than what they paid for it, and I could not come up to the price they paid for it entirely. I figure- that building three or four times. You see these question marks here?

Q. You tried to approach their limit?

A. I could not do it.

Mr. MATHEWSON: You put it down as your estimate although it was less than what we paid for it.

The WITNESS: I thought I made a mistake. I figured it half a dozen times and I could not make it, and I let it go as it was.

Boiler chimney, $3,040. No depreciation.

Total for the building, $29,776.

Apparatus in governor and boiler house:

One No. 11½ vertical exhauster, 122 cubic feet capacity, with flexible coupling, $2,910. No depreciation.

One 6½ by 24 horizontal Buckeye engine, $3,010; no depreciation.

One 24-inch Connelly gas governor, $1,375.

Three B. & W. boilers and two batteries, $8,000; no depreciation.

One 6 by 4-inch Knowles duplex plunger pump, $143; no depreciation.

One No. 6 Cochran feed water heater, $505; no depreciation.

One No. 10 steel-plate breeching, $750; no depreciation.

1586 One 3-inch Crown water meter, $165; no depreciation.

One No. 12½ Metropolitan injector, $78; no depreciation.

One blow-off tank, 3-inch diameter, 10 foot long, $73; no depreciation.

One 8-inch Hudson exhauster head, with steam exhaust water and gauge pipe, $1,885; no depreciation.

Toilet and wash basins and plumbing, $85; no depreciation.

Total for apparatus, $18,979.

Q. All brand new apparatus purchased within the last year?

A. All brand new apparatus.

By Mr. PAGE:

Q. On all this apparatus did you get the prices that the company paid, or is it your estimate?

A. My estimate, the same as in the instance of the buildings. I

obtained the prices myself from the various manufacturers where they were standard articles, such as toilets and wash basins.

Q. Did you find from the various manufacturers just what they had furnished this particular station for?

A. No, I went to the station and found out what they paid.

Q. And then you went to the manufacturers and asked them what they really received?

A. No, I asked them what they would furnish me such an engine or such an exhauster for, and more than that, I asked them to give me the benefit of the manufacturer's price, and they thought it was for my firm, and they would give cheaper prices than the gas company paid.

Q. What prices did you put in here, the cheaper prices?

A. Yes, the prices I obtained from them.

1587 Connections, 20 to 36-inch cast-iron, $43,291; no depreciation. All valves, $4,423; no depreciation.

Total for all connections and valves, $47,714.

Gas holder, one holder, 5,000,000 cubic feet capacity in five lifts, outer section 180 feet 6 inches diameter, steel guide frame consisting of twenty steel standards 192 feet high, crown supported with permanent wooden frame, in and outlet pipe, two sets each of 36 inch diameter for steel tanks; total value of holder and steel tank with guide frame complete, $346,915. Foundation for same of concrete, 203 feet diameter, 24 inches deep, with footings of an average depth of 20 feet below grade, and retaining wall 15 feet deep; total value, $47,050 without depreciation; making total value of holder and foundation $393,965, which does not include 5 per cent. engineering and 5 per cent. interest charges. Total for the entire station, including those charges, $514,955.

Q. The holder and the tank being new?

A. Yes, I believe that is all.

By Mr. PAGE:

Q. I understand that all these values have to have added to them in your estimate something for engineering charges and something for interest?

A. Yes.

Q. How much for engineering?

A. Five per cent.

Q. What does that include?

A. All the items referred to under the plants where the reduction was made on account of the simplicity of the structure as compared with the difficulty of examining an entire plant consisting of a great many buildings with so many connections and details. This was very much simpler and therefore I could not overlook so many items as in the other instances.

Q. When a company has built one five million cubic feet

1588 capacity plant they don't have to get up new plans and have new engineering problems to work on in another one identical with it, because it is located in another part of the city?

A. Yes, they have to arrange their valve house and connections

and machinery for this station to suit the locality that it is in. It is never alike in two different locations. It has to be adapted and suited to that particular location, and therefore, they have to make new plans and have new expense for engineering and preliminary expense for their grading, and all that sort of business in each instance.

Q. This item of 5 per cent. interest—did you take that for one year? Or, how long does it take to construct a steel tank boiler?

A. Well, I constructed the holder and it took two years.

Q. It took you two years to construct the steel tank at 132nd Street, did it?

A. From the time we had the order until we completed it it was about two years.

Q. From the time you commenced to make deliveries and do work on which you were drawing payment, it was not two years, was it?

A. Yes. Well, not quite. The total time from the time that the contract was placed until the order was finished was practically two years.

Q. It is generally estimated that it takes two years to build a brick tank holder and one year to build a steel tank holder, isn't it?

A. Well, it takes one year after we get hold of the foundation. In this instance there was a great deal of excavation and a deep grade had to be made and a great deal of retaining work had to be done by sheet piling and packing to keep the banks intact until we could get hold of the foundation. That consumed an enormous amount of time before we could construct the steel tank, although we had the material there on the ground, and of course the gas company made payments as fast as the material was shipped.
1589 The first material was shipped probably two months after receipt of the order, and the necessity of that is because the manufacturer cannot accumulate all the maetrial that is finished in his shop. It is delivered as soon as he finishes it.

Q. You have stated somewhere that the cost of filling and testing a tank was a part, and went in to make a part of the 5 per cent. engineering item?

A. Yes; the water for filling the tank is always paid for by the gas company and never by the contractor.

Q. And the method of testing a holder and a tank is to fill the tank with water and pump in air? Is that it?

A. Yes, for the preliminary test.

Q. Then after that test is satisfactory and the holder is accepted they exhaust the air and put the gas in immediately, don't they?

A. Yes; that is, we open the manhole plate on top of the holder and let the air out.

Q. They don't draw off the water—they use the water then right straight along?

A. Yes, that same water remains in right straight along; there is only one charge for the water.

Q. That is charged up to the expense of operation, isn't it?

A. No, I have charged it in my valuation of the cost of the tank.

Q. I know where you charge it, but the company will charge it up as part of the cost of operation, won't they?

A. No, sir, because it is not an operating expense; it is a holder expense, presumably for the reason that a holder cannot be used until it is filled with water, and the expense is only once, and therefore cannot be counted as operating expense. It is not a continuous expense.

Q. If the company should charge it in as such it ought to be eliminated?

A. Yes, it cannot be charged twice.

Inwood station, exhauster and valve house, $3,330 without
1590 depreciation; $3,230 with depreciation.

By Mr. KIRBY:

Q. Erected in 1886?

A. Yes.

Apparatus, one 6-inch McKenzie exhauster, 6-inch connection; one Smith and Sayre vertical engine, 4 by 6 inches; one 12-inch governor; one upright tubular boiler, 3 feet by 6 feet high, containing 52 one and one-half inch diameter steam connections, piping, steam fitting, steam and gas pressure gauges, one Cameron pump 3 inches by 5 inches. Total value of all above apparatus, allowing for depreciation, $1,640. Erected in 1898.

Q. No depreciation being for over 5 per cent.?

A. Yes, I gave that, allowing for depreciation.

Connections, 6 to 12 inches, $650; no depreciation. Those are cast iron.

One to 12-inch wrought iron connections, $18; no depreciation.

Valves, $255; no depreciation.

Total for connections and valves, $923.

One holder, 60,000 cubic feet capacity, in two lifts. Outer lift 40 feet diameter, 20 feet 6 inches deep, steel guide frame standards consisting of eight steel column standards with latticed steel bracing and tie rods, 12-inch inlet and outlet pipes for tank; 6-inch pressure when fully inflated; value, $11,882 without depreciation; $11,288 with depreciation.

Brick tank for same, concrete foundations, 47 feet in diameter, 21 feet 4 inches deep, $6,660; no depreciation.

Total for holder complete, $17,948. Did we give the total for the station before?

Mr. MATHEWSON: Yes, I think you did.

Q. All such buildings and apparatus are used for the dis-
1591 tribution of gas and not in its manufacture?

A. Yes, sir.

Mr. MATHEWSON: That was the Inwood station?

A. That was the Inwood station.

Q. Now, let us start with 14th Street and give the total value of each holder.

The MASTER: Subdivide the holders.

The WITNESS: 14th Street holders; six holders, 345,500 cubic feet capacity, constructed in two lifts with outer sections 95 feet diameter by 26 feet deep. Total value of holders, $152,052; pressure varying from a minimum of 4.55 to 4.95 inches when fully inflated.

Two holders of 250,000 cubic feet capacity each, 86 feet in diameter, constructed in two lifts, with an outer lift of 84 feet in diameter; total value with depreciation, $46,882. Pressure when fully inflated 4.75 inches.

Brick tanks for above holders, six tanks 97 feet in diameter by 26 feet deep with pile foundation, $219,039; no depreciation.

Two brick tanks, 86 feet in diameter by 26 feet deep with pile foundations, $57,383. Making a total for holders complete, $475,356.

Forty-second Street station, four holders, 250,000 cubic feet capacity, each constructed in two lifts with an outer lift of 95 feet 1½ inch in brick tanks; total value for the three holders with depreciation, $103,206. Pressure when fully inflated, 4.4 inches.

Four brick tanks for the above holders, 96 feet 10 inches diameter, 21 feet 6 inches deep, constructed on pile foundations, $120,384 with depreciation.

One steel tank holder 20 feet in diameter by 10 feet high.
1592 That holder is not in use at the present time. It can be used because it is connected and ready for use. The value of that holder is $2,800 without depreciation, and $2,188 with depreciation, making a total for all holders at that station of $225,778.

44th Street station. 4 holders, 375,000 cubic feet capacity, each constructed in two lifts with an outer lift of 89 feet diameter by 30 feet 6 inches deep pressure, when fully inflated 6 inches. Value of four holders with depreciation, $111,946.

One holder 2,000,000 cubic feet capacity in two lifts, 181 feet in diameter by 42 feet high. Total value allowing for depreciation, $104,982.

Two holders 125,000 cubic feet capacity each, single lift, 72 feet 6 inches in diameter, 5.5 inches pressure, which is the value allowed for depreciation, $15,480. The other holder is 6 inches pressure and its value with depreciation is $16,690.

Four brick tanks for the 375,000 cubic feet holders constructed in rock of the value of $214,747. The brick tanks for the 2,000,000 feet holders, is 185 feet in diameter by 41 feet 5 inches deep, constructed in rock and has a value of $276,269.

Two brick tanks, 75 feet diameter by 32 feet deep for the 225,000 cubic feet holders; they have a value of $74,815, allowing for depreciation, making a total for all holders at that works, $814,929.

21st Street station:

Four holders each of 400,000 cubic feet capacity in three lifts, pressure 8.7 inches, outer section 88 feet in diameter, 16 cast iron columns, standards and guide frame, total for the four holders, $201,848.

One holder, one and one-half million cubic feet capacity in two lifts.

Upper lift, 165 feet 8 inches diameter, pressure when fully inflated 5.9 inches, total value, allowing for depreciation.
1593 & 1594 $84,314.

Four brick tanks for the 400,000 cubic feet holders, total value, $125,708.

Brick tank for the one and a half million cubic feet holders, 171 feet diameter by 37 feet 2 inches deep on concrete foundations, $139,970; making a total for all the holders in brick tanks at that works, $561,840.

99th Street station:

Two holders, 600,000 cubic feet capacity in three lifts.

Outer lift 100 feet in diameter, pressure when fully inflated, 7.2 inches. Total value of both holders $59,674 without depreciation.

One holder 300,000 cubic feet capacity in two lifts with an outer section 88 feet, having a total pressure of 4.5 inches, value $24,914.

One holder 100,000 cubic feet capacity in one lift, 67 feet diameter, 4.25 inches pressure; total value without depreciation $12,271. Total for the four holders above referred to $156,533 without depreciation. With depreciation $140,880.

Two brick tanks for the 600,000 feet holders each $35,954.

Brick tank for the 300,000-foot holder, $28,830.

Brick tank for the 100,000 feet holder, $20,488.

All of these brick tanks are constructed on pile foundation.

Total for all brick tanks, $121,226, allowing for depreciation.

At 6.05 P. M. adjourned to Tuesday, September 4th, 1906, at 1 P. M.

Last Exhibits:

Complainant's 233.
State's N.
City's 34.

1595 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, TUESDAY, September 4, 1906—1 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Burr, Mr. Kirby.

1596 FREDERICK J. MAYER, being further examined, testified as follows:

Cross-examination by Mr. PAGE (continued):

Q. Will you take the five million-foot holder at 132d Street, and give me the various items, and how you arrive at the value, beginning first with the tank?

A. The entire weight of that holder is 5,256,280 pounds, of steel of various character, and the total price per pound figured for that holder under present conditions is 6.6 cents per pound, and that 6.6 was made up from the following factors: Material, 2.2 cents per pound; freight, .20 cents; drayage, .10 cents; shop labor, .73; labor, 1.28; total, 4.57 cents per pound. To which must be added for operating expenses 15 per cent., or .68 cents per pound, and for miscellaneous expenses .46 cents per pound, making a total of 5.71 cents. Then a profit of 15 per cent., equal to .85 cents per pound, making a total of 6.56 per pound, for which a price was applied of 6.6 cents.

Q. When you add the value of this holder into the rest of the apparatus, then you add another ten per cent., don't you?

A. No, 5 per cent., in the interest of holder stations.

Q. Besides the 10 per cent. which you had allowed here for miscellaneous expenses?

A. Only for the holder proper; that is, 10 per cent., which is the manufacturers' 10 per cent. in the instance of the cost of the holder.

Q. Have you given here the tank or the holder?

A. The tank and the holder, complete, all steel work.

Q. Where do you get the item allowing for rivets in the computation which you have made?

In the item of material at 2.26 cents per pound. That 2.26 cents is made up from the following factors: Do you want me to give the detail prices of those?

1597 Q. I would like to have them, yes.

A. Open Hearth Steel plates, 1.83 cents per pound; flange steel, 1.93; sheet steel, 1.93; gas holder steel, 2.05; steel rib plates, 3 cents; universal steel plates, 1.83; steel angles, 1.93; steel channels, 1.93; steel I-beams, 1.93; flat steel bars, 1.73; steel beads, 1.73; double steel beads, 2.03; steel checkered plates, 3 cents; round steel bars, 1.73; steel tees, 1.83; tank rivets, 2.05; gas holder rivets, 4.25; boiler rivets, 2.75.

Q. How did you estimate the labor? You have given two elements of labor, haven't you?

A. One is shop labor and the other is erection labor. That is based on actual conditions as they exist at the present time, taken from my construction accounts.

Q. I suppose the labor item would be divided into ordinary labor and skilled labor, would it not?

A. Yes, sir.

Q. How much do you allow for ordinary labor?

A. That varies, of course, in the shop from those in the field. Shop wages are, for riveters, $2.50 per day; rivet helpers, $1.62; holders on, $1.62; rivet heaters, $1.26; template makers, $3.50; fitters, $3.25; machinists, $2.70; machinists's helpers, $1.62; fitters, $3.00; pipe fitters, $2.79; pipe fitters' helpers, $1.75; carpenters, $2.75; pattern makers, $3.25; pattern makers' boys, $1.50; molders, $3.00; core makers, $2.50; helpers, $2.00; boys, 84 cents; ordinary laborers, $2.00 per day.

Q. How many hours to a day's work?

A. Eight hours. No, it is nine hours in the shop and eight hours in the field. That is all shop wages that I have given you just now.

By Mr. MATHEWSON:

Q. Field wages are the wages used in setting the apparatus, you mean?

A. Yes, at the point of construction, assembling and construction. Foremen, $5 to $6 per day; boiler makers and caulkers, $3.20
1598 a day; riggers, $3.20; holders on, $2.50; heaters and helpers, $2.00; laborers, $1.75; blacksmiths, $3.50; mechanics, $3.00; helpers on apparatus, $2.00 to $2.50; carpenters, $4.80. Now, I have got the labor for erecting the permanent timber frame which is located on the inside of the tank, and which supports the crown of the inner construction, all steel plate. The labor is $16.50 per thousand feet of timber in the frame, and the labor for erecting of scaffolds is $7.25 per thousand feet of lumber in the frame. Housesmiths, $4.50.

By Mr. PAGE:

Q. Where do you get your figures of labor cost?

A. From my construction accounts.

Q. The construction accounts of Bartlett, Hayward & Company?

A. Yes.

Q. Are those the rates of wages that you figure in as a co-efficient when you bid on a tank?

A. Yes, absolutely the same.

Q. Bartlett, Hayward & Company built the gas holder at 132d Street, didn't they?

A. Yes, sir.

Q. And have you taken those figures that you have given here from the estimate or contract price which you gave to the Consolidated Gas Company?

A. No, sir, I have applied the figures as they exist to-day.

Q. In making that application does this holder in total cost come to more or less than the figure which you gave to the Consolidated Gas Company?

A. I think the figure comes to more for present conditions. The figure given the Consolidated Gas Company for the 132d Street holder was a particularly low one for the reason that at that time we had under consideration the construction of four holders of the same capacity, one for the Consolidated Company, two for the
1599 Standard Company and one, I think, for the Mutual Company, if my memory serves me correctly, representing four times the amount of weight for which we were able to place an order with the mills, and under which conditions we of course received a special and a low price.

Q. Then, if you were called upon to erect all the holders of the Consolidated Gas Company now at one time you would make a much lower figure per holder?

A. Well, all the holders are somewhat of different material, so I could not hardly include that under similar conditions which I outlined just now.

Q. Under the theory under which you have been giving testimony, that you are giving the price that it would cost to reproduce these holders new to-day, if you had that contract to reproduce all those holders at one time you would figure a much lower price on each holder than you have given here to-day, wouldn't you?

A. As I say, all the holders would not come within the limitations of the conditions which I outlined just now, because it would require a great many years to construct all of them, but for the four or five of them which could be constructed within two years, I could control the price of material for that length of time; beyond that it would be impossible.

Q. How many holders of five million feet capacity has the Consolidated Gas Company; do you recall offhand?

A. No, I do not.

Q. This holder at 132d Street has just been completed, has it not? Gas has been turned in since this hearing, hasn't it?

A. No.

Q. This year?

A. It was before that.

Q. Not since you have been here, but I believe that Mr. Bradley testified that it would be turned on that day that he was here.

A. That I do not know; I thought you referred to the time that I have been here.

1600 Q. I understand that in giving this estimate of what it would cost to reproduce this contract, you paid no attention to the figures that actually went to make up the cost, but you have proceeded under this theory of estimation of yours, which produces a much larger result?

A. I do not know that it is much larger. I do not know just what the figure was for those four holders, but these are the conditions as they exist to-day and which will have to be applied for to-day's reproduction.

By Mr. MATHEWSON:

Q. If you were to make a contract to-day.

A. If I were to make a contract that would be the figure.

By Mr. PAGE:

Q. If you were asked to make a contract to-day on four holders of 5,000,000 feet capacity, you would make a contract for much less per holder than the figure you have given, wouldn't you?

A. I would not say much less; it would be the conditions of labor as they are to-day, because that could not be changed.

Q. It would be as much less than this 132d Street holder actually cost, than it cost under your theoretical scheme?

A. Less the difference in existing prices of to-day as compared to those for labor and for material both; there is a direct increase in both for present conditions.

Q. I thought you said that within the last two years there has been no material increase or decrease in the rates of steel or labor, didn't you?

A. If I remember my testimony correctly, I think I stated that the

material at present was perhaps slightly less and the labor slightly more, so that one would compensate the other approximately.

1601 Q. It would amount to about the same thing?

A. Yes; now, when I speak of labor I mean total labor for the entire construction. Of course you understand that the wages are very much higher at present than they were at that time.

Q. At what time?

A. In 1903 and particularly 1904. From 1903 to 1904 the rates were jumping very fast.

Q. When did they cease to jump—in 1904?

A. They have not ceased to jump yet, and God only knows when they will, nobody knows.

Q. Then, as I understand you, as labor jumps up, material jumps down, so that they keep about an equilibrium?

A. Not absolutely. No, that was merely an opinion that I gave you off-hand, because I had that condition in my mind at the time I said that. I believe that it is approximately correct. For instance, the reason that the total cost of labor is less at the present time than it was in 1903, is due to the fact that we were compelled to improve our field machinery in order to offset the constantly increasing demand for wages.

Q. That has been the experience of every line of manufacture, hasn't it?

A. Yes, I presume so.

Q. That is, as wages increase the inventive genius of man on the other hand produces labor saving machinery and therefore we arrive at the result that we can produce cheaper although we pay more for labor?

A. Yes, I presume that the same conditions exist in other branches of business the same as ours.

Q. Now, if you will turn to the four million capacity tank at 65th Street, that is a holder with a brick tank?

A. Yes, sir; two holders, each four million feet.

Q. Now, will you give me the elements of cost that enter into the production of the tanks?

1602 A. The total weight of the two holders—that is, steel work and iron work I refer to—is 5,614,720 pounds. The unit price is 7.1 cents a pound, making a total of $398,645.

Q. You give for that as a unit figure 7.1 cents per pound?

A. Yes, sir.

Q. Is there any allowance there for excavation?

A. No, that comes in the cost of the tank.

Q. That is what I asked for—the tank?

A. The tank alone?

Q. Yes; I want the tank first.

A. The two tanks cost $480,280.

Q. For what?

A. They are brick tanks excavated for 65 per cent. of the depth in rock.

Q. How much do you allow, how many cubic feet of rock and at

how much per cubic foot, if that is what you estimated, or per cubic yard?

A. The total cost amounts to 20.1 cents per cubic foot, figuring the bottom as being horizontal.

Q. The bottom is not horizontal?

A. No; but it does not make any difference in the application of a unit factor if you figure them on the same basis.

Q. How many million feet do you make it that you excavated there?

A. I estimated another holder, which had a brick tank of 170 feet in diameter by 38 feet 9 inches in depth; this tank was 187 in diameter by 43 feet 6 inches in depth; so that the general dimensions did not differ materially. And in the other instance I found that the excavation amounted to 38,420 cubic yards. That, figured at $1.50 a yard——

Q. Is that in rock?

A. No, in earth. The back filling amounted to 9,452 cubic yards at $1.50; the concrete, 1,462 cubic yards, at $7.00. The brick, 1,618,000, at $25.00, laid; the stone landing piers at $3.50 per cubic foot.

Q. And how much per cubic foot for your landing stones?

A. $3.50. That is granite, $3.50 per cubic foot. Now, 1603 the total cost of that tank, assuming the bottom to be flat, is 14.4 cents per cubic foot. If it would have been rock excavation for the entire depth it would have added $2.00 per cubic yard, which is equal to 8.7 cents per cubic foot. That would have made a total of 23.1 cents per cubic foot, completed work. In this instance I have applied the difference between the total and 65 per cent. of rock excavation, making the figure, instead of 23.1 cents, 20.1 cents.

Q. Was there any granite coping?

A. Yes, sir, that is included. Eighteen pier copings, 457 feet of stone coping: that is all included in that price of $3.50 per cubic foot.

Q. Is that not a pretty good price for that?

A. That is the price that I obtained from the builders; that is extraordinary size——

Q. What kind of granite did you get—imported Scotch granite?

A. No; any kind that can be gotten under local conditions; if that can be got and used, it will answer the same purpose.

Q. It was not a fancy granite, then?

A. No, sir.

By Mr. MATHEWSON:

Q. What did you say about large blocks or size?

A. Its thickness is from 3 to 4 or 5 inches—about equal to that of copings and landing piers, and the price was given on that basis.

By Mr. PAGE:

Q. Did you have any anchor bolts there?

A. They are in with the steel work of the holders.

Q. You figured those at 7.1 cents?

A. That and the pipes inside of the tank, as well as the guide rails and anchor bolts for the guide rails.

Q. Is your estimate given on the basis that you would reproduce these two tanks together new?

A. Yes, sir.

1604 Q. Have you made any allowance because of a wholesale rate on two tanks rather than one?

A. No, I figured upon actual cost, so much per thousand cubic feet of work, so it does not make any difference whether it is one or two.

Q. Wouldn't you, if you were bidding on two tanks to be erected side by side, make a cheaper bid than you would if you were to bid on one tank? Two tanks exactly similar, and the holders?

A. I would not make any allowance or reduction in price on account of building two tanks, but the circumstance of building two tanks right close together diminishes the price as compared with the erection of two single tanks in different localities, because there is less excavation for the two tanks so located. In constructions of this kind, where there is no shop work to be estimated, you cannot take that into consideration.

Q. How about the holders?

A. It is different with the holders. You would have a certain amount of saving in your shop work, because a great deal of the head work and other work performed in the shop would be applied to the two holders as well as to one.

Q. But in making this estimate you have given us here, you have treated it as if you were building two entirely distinct tanks at different times.

A. I did, yes, sir, for the holders.

Q. Yes. And that is so with your estimate of every bit of apparatus you have testified to?

A. No, I would not say that.

Q. Not taking into consideration the fact that you could buy a large quantity of it at one time at lower prices than you could a single machine.

A. No, I cannot base an estimate of this character upon that, but you can in an estimate for a contract, when you know that the conditions actually exist at the time you make the contract.

1605 Q. Well, I suppose that if you could not, you mean you did not.

A. I did not; besides which I do not know that these two holders were built at the same time. They may have been built at different times.

Q. But to-day you are building them in your mind at the same time?

A. Yes, but not all at once.

Q. Yes.

A. It would take a good many years to build all these holders.

Q. It only takes a few minutes to reproduce these gas holders here. Now as I understand you, in examining the 14th and 42nd Street plants, for instance, you did not take into consideration whether they were commercially or economically worth replacing, did you?

A. No, sir; I only figured on what I found there.

Q. That is what it would cost to reproduce that apparatus, whether or not it was commercially and economically an apparatus that would be built to-day?

A. I paid no attention to that whatever.

Q. And did you take into consideration whether gas could be reproduced at those particular plants at $1.50 or 50 cents per thousand cubic feet?

A. I did not consider it at all because it had no bearing whatever on the apparatus as I found them.

Q. As you valued it?

A. As I valued it.

Q. Now where a plant was of an old type which, owing to the advance in the science of gas engineering, would not be built to-day, did you allow anything for depreciation by reason of that fact?

A. No, sir.

Q. Where an apparatus was obsolete and not in use, but was standing in place, did you estimate that according to real value, or did you estimate what it would cost to reproduce that apparatus new to-day?

A. I don't recollect any apparatus that was obsolete; there were a good many that were not in use owing to the season of the
1606 year, where the demands on the production is less than at other times of the year.

Q. Will you tell me to what use you can put the hydrogen scrubber that is at the 99th Street plant to-day, what use can you make of a hydrogen scrubber to-day?

A. Well, it can be used for the scrubbing of water gas as they make it to-day.

Q. The hydrogen scrubber was a portion of the old Tessae du Motay plant, wasn't it, when they used to manufacture a hydrogen gas separately and interject it into the make of the water gas?

A. Yes, sir.

Q. And it is an apparatus that has been abandoned for years, hasn't it, and supplanted by several different processes since?

A. Well, but the scrubber of the Tessae du Motay, or any other carbureted water gas process can be used in connection with the U. G. I. as well as anything else.

Q. What did you use it for?

A. For the elimination of mechanically suspended impurities which exist in both processes. The process has nothing to do with that kind of imperfection.

Q. You find in this 99th Street station that they have the necessary scrubbers outside of the hydrogen scrubber, haven't they?

A. Yes, sir.

Q. Would there have to be any alterations made in the scrubber to use it to-day?

A. Well, it is quite possible that in the designing of the scrubbers for the U. G. I. apparatus it was taken into consideration that this scrubber should be used.

Q. Is it used? I think you have it marked as not in use.

A. I presume it is used when they make the full amount of gas.

Q. Will you turn to your data of the scrubbing apparatus and compute the amount of scrubbing surface that you have, if you call

it such, and see if that is sufficient to take care of the production at that particular plant without the use of this hydrogen
1607 scrubber?

A. I haven't got all that data here with me.

Q. Turn to the 99th Street plant.

A. Two hydrogen scrubbers 28 feet high?

Q. I thought you only had one, but I see you have two there.

A. Two.

Q. Take the other scrubber, you say "out of commission"?

A. I say it was out of commission when I examined the plant.

Q. Are they connected with anything?

A. Yes, sir.

Q. What are they conected with?

A. With the pipe system.

Q. Where does the pipe system lead to?

A. I presume now it leads to the tank of the U. G. I. process.

Q. You say you presume. Do you know?

A. I cannot recall it now. I have examined so many plants I would have to examine that particularly if you want me to give an intelligent answer.

Q. What did you mean when you said out of commission? You did not say not in use, but out of commission. That is what we say when a thing is laid up and abandoned practically, isn't it?

A. It is not abandoned, it is laid up for the present, but not abandoned. You will find that same remark about several other apparatus. It means out of use temporarily.

Q. Take the other scrubbers you have up there and see whether you have enough to do the business?

A. There are two more scrubbers above that of the same size.

Q. Two hot scrubbers?

A. Two hot scrubbers, yes, sir.

Q. Those are 21 feet high and 8 feet 6 inches in diameter?

A. Yes.

Q. How much gas would those two scrubbers take care of?

A. 243,000 cubic feet in 24 hours.

1608 Q. Will you give me your calculation on that?

A. I know it takes five cubic feet of volume for each thousand cubic feet of gas passed in 24 hours.

Q. Are there any scrubbers up there in that plant?

A. There are two more up there 10 feet in diameter by 24 feet high.

Q. Take those up.

A. Do you want the capacity of those?

Q. Yes.

A. 384,000 cubic feet in 24 hours.

Q. And the other was what?

A. 243,000 cubic feet.

Q. Now, if we multiply each of those by two and add them together we will get the answer to the question that I asked?

A. There are more scrubbers. 1,254,000 cubic feet. There are more scrubbers there.

Q. Well, give us those?

Mr. MATHEWSON: Does that include the hydrogen scrubbers?
The WITNESS: No, we can take those next.
Q. No, do not take the hydrogen scrubbers. Leave those out.
A. I don't find any more except the two hydrogen scrubbers.
Q. Now give me the capacity of the two hydrogen scrubbers?
A. They are about the same as the others, I guess.
Q. Then it is about the same?
A. They are about the same as the two hot scrubbers. That makes 1,740,000 cubic feet per day in those scrubbers that I have named.
Q. What is the capacity of this plant at 99th Street?
A. 5,500,000 cubic feet.
Q. Then you could not pass the total production of the plant through the scrubbers, could you, if you have only got 1,740,000 cubic feet?
A. Well, in addition to these there are additional scrub-
1609 bers, I assume, in the U. G. I. apparatus, or whatever they furnish in connection with the apparatus.
Q. When you buy a set of U. G. I. apparatus, it includes, does it, the generator, carbureter, the superheater and the scrubbers and condensers necessary?
A. Not always.
Q. Does it in this case?
A. I was just looking when you asked the question.
Q. Have you so estimated it here?
A. No, I find no scrubbers there.
Q. I asked you when you were considering this plant whether you found there the necessary scrubbers, condensers and purifiers to produce the full capacity?
A. Yes, sir.
Q. You said you did. Now then, how do you explain the fact that there are only scrubbers sufficient to take care of 1,740,000 cubic feet per day, when the capacity of the works, according to the generators, is 5,500,000 cubic feet per day?
A. That is on the basis of my applying a figure of five cubic feet per thousand cubic feet of gas being passed through that apparatus. They evidently are passing it through with much less volume and get the same result.
Q. Then your computation is wrong as to the capacity of the scrubbers, isn't it?
A. No, not necessarily. You cannot scrub that gas too much. I should provide a larger scrubbing capacity, but that is all that I have included there.
Q. When you took the unit of five feet, on what did you base it?
A. On my experience that is what I should apply.

By Mr. MATHEWSON:

Q. Is that a coal gas or water gas plant at 99th Street?
A. Coal gas.
Mr. PAGE: No, it is water gas.
1610 The WITNESS: That is right. That is where I made my mistake. It is water gas.

By Mr. PAGE:

Q. Now, water gas, how much do you pass through the scrubber in a day?

A. Well, the scrubbers in water gas are required very much smaller than those for coal gas. We take out certain impurities in the water gas and in the coal gas we take out ammonia.

Q. What unit would you apply as a unit to the water gas plant?

A. Well, it is a very small cubical part, perhaps one and one-half cubic feet per thousand, up to two feet per thousand. It is not very material in the water gas.

Q. Now will you make your calculations then on the four scrubbers, ignoring the hydrogen scrubbers?

A. As to capacity?

Q. Yes, as to capacity for water gas.

Mr. MATHEWSON: At the rate he has indicated, I suppose?

Mr. PAGE: Well, the correct rate, if he has got it there.

Mr. MATHEWSON: There isn't any correct rate. Some works do not use any.

The WITNESS: Oh, no, it is very immaterial with water gas.

Mr. MATHEWSON: In coal gas you have to have a fixed proportion. In water gas you do not.

Q. And it don't make much difference how large your scrubber is?

A. No, it doesn't, because you regulate with the amount of water or material you have inside for filling.

Q. Then certainly these four scrubbers can take care of
1611 whatever is produced there without any regard to the hydrogen scrubbers, can't they?

A. Well, I wouldn't say that.

Q. Well, if it does not make any difference what the size of your scrubber is, certainly if you have got two big scrubbers like these or four big scrubbers, they would take care of this capacity?

A. You have got to have enough, of course, for a minimum capacity.

Q. Now, have you enough for a minimum capacity in those four scrubbers?

A. I wouldn't say that they have.

Q. Well, if you were going to build a water gas plant, you would have some idea what a capacity of scrubber you would have to have for 5,500,000 cubic feet.

A. I was just trying to figure that for water gas. Well, (after figuring) it will be on the basis of from one to one and one-half, it will be on the basis of 4,500,000 to 6,000,000, averaging about 5,000,000. It is not very material what the size of a scrubber in a water gas plant is. Of course you have got to have a certain minimum capacity.

Q. Then in these four scrubbers, excluding the hydrogen scrubbers, you certainly have sufficient to take care of the production of that plant, haven't you?

A. Well, as I said before, I wouldn't say that positively.

Q. Well it is somewhere between four and one-half and six millions you say?

A. Yes, sir.

Q. And the capacity of the plant is 5,500,00?

A. Yes, sir.

By Mr. MATHEWSON:

Q. Then how do you figure it out there would be sufficient if it is four and one-half million and the capacity of the plant is five and one-half million.

A. Well, from four and one-half to six.

1612 Q. No, according to whether you took one or one and one-half. It is according to the kind of coal, how much gas you get in passing through the apparatus. Some require more. If you use coke it is a different capacity than coal.

By Mr. PAGE:

Q. Well, coke makes more ashes than hard coal.

A. Some does and some don't.

Q. Where are these hydrogen scrubbers located with reference to the generating plant and with reference to the balance of the plant.

A. Thy are not very far from the other scrubbers in the yard. They are both in the yard. Both the hot scrubbers and the hydrogen scrubbers.

Q. Are they both on the same side of the generating plant?

A. What is this, 99th Street?

Q. Yes.

A. No, I think they are all on the opposite side.

Q. No, I say are the scrubbers that you testified to and the hydrogen scrubbers both on the same side as the generating plant?

A. Well, what I meant is, they are on the opposite side of the yard from where the generator house is. All the scrubbers are together on the opposite side of the yard.

Q. But as related to the generator house, they are all on the same side?

A. All on the same side, yes, sir.

Q. You have given considerable testimony relating to yard connections. How did you measure those up?

A. Partly on the plans and partly on top of the ground.

Q. Wherever the pipes were on top of the ground you actually measured them, did you, you and your assistants?

A. No. I mean I took the measurements on top of the ground of all the pipes located below the ground.

1613 Q. Of course where a pipe was visible, did you measure that pipe?

A. Yes, sir.

Q. And where a pipe was covered, you took some plans that were furnished you?

A. Partly, and where there was no plan, I took the direction of the pipe indicated by the point where it entered the ground and the point where it came out of the ground.

Q. Can you recall whether there are any pipes shown on the plans, running from the generating apparatus to these hydrogen scrubbers?

A. In 99th Street?

Q. Yes.

A. As near as I can remember, the pipe in the generating house was all overhead, and then it turned down at the end of the generator house to a point below the ground and extended across the yard underground, then came out of the ground and connected to these scrubbers which were in the yard on the opposite side from the generator house.

Q. And they would connect with the scrubber at the top, would they, or at the bottom?

A. The bottom. That is, the inlet to the scrubber was at the bottom of the apparatus.

Q. And the water comes down?

A. Yes, sir.

Q. And at the top there is a pipe to carry off the gas in the scrubber?

A. The same pipe extends through to the top of the scrubber, then goes to the outlet of the pass and becomes a by-pass in connection with a second pipe.

Q. Do you remember whether these hydrogen scrubbers were connected at the top?

A. As near as I can remember they were connected with a common pipe across the top.

Q. Common with what?

A. Common to all the scrubbers.

Q. Were there any valves to cut off the——

A. Yes, sir. The necessary inlet and outlet and the apparatus to form the by-pass.

1614 Q. Where did you get your information to put these scrubbers down as "out of commission?"

A. That simply indicated they were not in use at the time of my investigation. Some of the men used the words "not in commission" and others "not in use," and it was just an expression that they were not in use at that time, depending upon the man who made the investigation at that plant.

Q. Did you find all of these scrubbers in operation?

A. Yes, sir, only when they are marked otherwise.

Q. When did you make your examination?

A. Well, during the last seven weeks.

Q. Was the plant operating at its full capacity during the term you were examining?

A. No, sir, I think not. I didn't make any particular inquiry about that, but no plant is in the summer time.

Q. You didn't make any inquiry to find out whether or not these various apparatuses that are in the different plants were really used or not then, I understand. No, sir, I did not, at that time. Of course they had to be used when the plant was operated to the full capacity.

Mr. PAGE: I think that is all.

Cross-examination by Mr. BURR:

Q. On page 1581 of the record there seems to be an uncertainty in your answer. The question is, referring to the 111th Street station, "Do you know as a fact that this plant is not used as an operat-" ing plant by the Consolidated Gas Company? A. Yes, sir, it is " used as an operating plant.

"By Mr. MATHEWSON:

"Q. You mean as a manufacturing plant? A. I mean as a man-" ufacturing plant, yes, sir.

1615 "By Mr. PAGE:

"Q. But it could be operated if necessary? A. Yes, sir, at any "time." Now what is the fact? Is that an operating plant or is it not an operating plant?

A. It is not.

Q. And further on you testified that in your opinion it has not been used as an operating plant for several years.

Mr. MATHEWSON: What plant is that?

Mr. BURR: 111*st* Street.

Mr. MATHEWSON: Do you and the witness, each know what you mean by operating.

Mr. BURR: I will ask him.

Q. When I asked you if it is an operating plant at 111th Street, what did you understand by that question?

A. That you mean that gas is manufactured there.

Q. That is exactly what I meant. And I understand you to say it is not used for the manufacture of gas.

A. No, sir, it is not.

Q. And therefore it is not used as a manufacturing plant?

A. No, sir.

By Mr. MATHEWSON:

Q. But it is in operation as a distributing plant?

A. As a distributing plant, yes, sir.

Mr. BURR: I am not asking about that.

By Mr. BURR:

Q. It is not used as a plant for the manufacture of gas and has not been for several years, according to your testimony?

A. No, sir.

Q. What other one of the plants you examined is not being used now for the manufacture of gas?

A. I don't recall any except the holder stations and that
1616 portion of 18th Street that is still in existence.

Q. Well now, that plant at 18th Street is not being operated?

A. No, sir, except as a holder station; not as a manufacturing station.

Q. It is not operated as a plant for the manufacture of gas?

A. No, sir.

Q. Do you know how long it has been out of such use as an operating plant or manufacturing plant?
A. The 18th Street?
Q. Yes, sir.
A. I don't remember exactly, but I think it is somewhere since 1902 or 1903.
Q. You have had a general supervision of the plants and holders of the Consolidated Gas Company for same years, haven't you?
A. Never have.
Q. Haven't you inspected them from time to time heretofore?
A. No, sir.
Q. Before you were called as a witness here?
A. No, sir, I built a great many holders for them.
Q. Have you never been called upon to inspect their plant to find out what repairs were necessary, or new construction work was necessary?
A. Oh, yes.
Q. You have?
A. Yes.
Q. How often?
A. I can't recall the number of times. Quite frequently in the years past.
Q. Frequently within the past five years?
A. Very seldom within the past five years, for the reason that during that time most of the plants designed for alteration, were designed by the gas company itself.
Q. Without competition?
A. Oh, no, always with competition. We never had a job from the Consolidated Gas Company without competition.
Q. I understood you to say they were designed by the gas company themselves——
A. That is, upon the alterations, upon which the various bidders submitted their various propositions.
Q. And hadn't you before you made up this schedule, a
1617 list of all the plants of the Consolidated Gas Company in your possession?
A. No, sir.
Q. Didn't Bartlett, Haywood & Company have such a list?
A. Oh, no. It would be impossible for them to have it.
Q. When did you first begin to make that list up, seven weeks ago?
A. Yes, sir.
Q. And was that made up by you from a personal inspection of each particular apparatus?
A. Yes, sir; that is, by my men under my supervision.
Q. Was it the man who made the mistake in the valuation for you which necessitated the corrections which you have made here?
A. Oh, that was only the clerk in transferring the figure, in leaving off a decimal point.
Q. It was more than that.
A. Well, all the mistakes are of that kind.
Q. You recall that in some of the addenda to these lists of the apparatus of various plants, you called attention to the fact that you

made a mistake in placing the valuation on some of the parts, don't you recall that?

A. It was not a mistake, as far as the addenda was concerned; it was simply an addition which I found necessary upon my personal inspection after the lists had been completed.

Q. You had to increase the valuations because you learned that certain parts of the apparatus were recently purchased, or for some other reason, isn't that so?

A. No, for the reason that I found conditions to exist that I had not observed in my first examination. I went to each of the works repeatedly.

Q. Who called your attention to the fact that you had not observed that on your examination?

A. I found that by going over the works repeatedly myself. I had to change my lists continuously from day to day in making my examinations. When I was not quite sure I sent my man,
1618 and when I did not get an intelligent reply from him I went myself.

Q. No one called your attention to it then?

A. My own men, yes, sir.

Q. Who gave you the dates of the construction of these various apparatus and plants?

A. The various superintendents at the works, as near as they could recollect, of course.

Q. I think you omitted, Mr. Mayer, to give the value of the building in detail at the 14th Street plant?

A. 14th Street?

Q. Yes.

A. I do not remember whether I did or not.

Q. No, you did not.

A. Do you want it?

Q. If you please?

A. 14th Street plant?

Q. Yes.

A. Office building, $6,752 without depreciation, $6,077 with.
Pay room, $2,762 without, $2,486 with.
Building over alley, $622 without, $560 with.
Storeroom, $5,183 without, $4,665 with.
Boiler room, $5,630 without, $5,067 with.
Stack, $1,350 without, $1,215 with.

Q. Do you know when that stack was built?

A. No, sir, I do not.

Q. Why did you allow any depreciation for it?

A. For present condition and general appearance.

Q. What was its present condition and general appearance?

A. Such as would make me think 10 per cent. depreciation should be allowed on my valuation.

Q. Does it appear as if it had been built for 20 years?

A. It is very hard to remember all those details now. If I was on the ground and had another look at it I could better answer that question.

Q. Did you make any memorandum at the time you inspected the plant?

A. Yes.

Q. Any memorandum which would inform you now if you had that data?

A. No, the matter of depreciation in a brick chimney is
1619 simply the impression it makes on a man competent to judge, and that is all I can say now. That is what I thought at the time.

Q. What did you say the value of that was?

A. $1,350 without, $1,215 with.

Q. By what process did you arrive at that valuation?

A. There was 56 cubic yards of excavation, 17,000 bricks, 36 piles, 500 feet of capping and planking.

Q. I understood you to say that you were not an expert nor did you pretend to be an expert upon anything else but iron. You are not an expert on brickwork, are you?

A. No, I didn't say that. I have designed and built a great many buildings.

Q. You might continue and give valuations.

A. Engine room, $4,400 without, $3,960 with.

Exhauster house, $4,315 without, $3,884 with.

Machine shop, $8,342 without, $7,508 with.

Smith shop, $8,843 without; $7,959 with.

Condenser house, $18,686 without; $16,818 with.

Q. Do you know when that was built?

A. About 1870.

Q. Do you know the year the machine shop was built?

A. The machine shop—1870.

Q. The exhauster house?

A. 1870.

Shed, $3,090 without; $3,070 with.

Large purifier house, $50,160 without; $45,144 with.

Small purifier house, $15,839 without; $14,256 with.

Oxide house, $10,671 without; $9,604 with.

Meter house, $10,693; no depreciation.

Center seal house, $809 without; $729 with.

Center seal house No. 2, same value.

Boiler house, $2,305 without; $2,075 with.

Valve house, $1,159 without; $1,043 with.

Brick walls around holder yard, $21,526; no depreciation.

1620 Retort house, $200,980 without; $170,833 with.

Q. What year was the retort house built?

A. 1853.

Bench foundations, $36,360; no depreciation.

Scrubber house, $2,128 without; $1,915 with.

Brick walls on Avenues C and D, $423; no depreciation.

Brick walls on 14th and 15th Streets, $6,611 without; $5,950 with.

Shed, $4,414 without; $3,972 with.

Q. Is that a coal shed?

A. That is a shed 75 feet 6 inches by 21 feet 6 inches by 17 feet, the first shed.

The next shed, $4,414 without depreciation; $3,972 with.
Coke passage, $24,343 without; $21,910 with.
Gas engine house, $1,658 without; $1,625 with.
Coal hopper building, $7,094 without; $6,952 with.
Coal shed, $167,729 without; $164,375 with.
Yard between office and retort house, $4,707; no depreciation.
Rigger house at end of coal shaft, $1,281 without; $1,163 with.
Small office, $100; no depreciation.
Coal and coke storage, $4,264; no depreciation.
Fencing and timber retaining fences around coke and coal storage, $10,305; no depreciation.
Boiler and engine house, $1,739; no depreciation.
Boiler house and well, $1,278 without, and $1,253 with.
Boiler house, $1,017 without, and $997 with.
Valve house, $169; no depreciation.
Exhauster house, $19,494; no depreciation.
Boiler house, $3,384; no depreciation.
Q. When was that built; do you know?
A. No, sir, I do not.
Q. The exhauster house—can you tell me when that was built?
A. No, sir, I cannot. There is a new boiler house in
1621 course of construction as noted in the addenda. The value of that building in its present condition is $6,000.
Tar and ammonia tanks foundations, $1,620; no depreciation.
Coke office, $290 without depreciation; $261 with.
Boiler house, $3,800 without; $3,420 with.
Q. Can you tell when that was built?
A. 1865.
Clay mill and storage, $1,184 without; $1,066 with.
Storage shed, $1,475 without; $1,328 with.
Storage shed, $813 without; $732 with.
Stable, $8,143 without; $7,329 with.
Storage shed, $2,140 without; $1,926 with.
Carriage room, shed No. 1, $835 without; $752 with.
Pump house, $238 without; $215 with.
Storage shed, $3,279 without; $3,115 with.
Storage shed and tank——
Q. Is that the same tank regarding which you testified before?
A. No, sir; $2,784 without; $2,645 with.
Storage shed, $1,[illegible]0 without; $1,254 with.
Fences on east side of Avenue D and between 14th and 15th Streets, also on 14th and 15th Streets; also on 17th and 18th Streets and between 15th and 16th, as well as westerly side of Avenue D between 14th and 15th Streets, and Avenue C between 14th and 15th Streets. Total $7,585 without; $7,206 with.
Holder yard, $904 without; $723 with.
Boiler house, $1,831 without; $1,648 with.
Weigh office, $1,367 without; $1,230 with.
One-story brick building, $149 without; $134 with.
Valve house, $168 without; $151 with.
Boiler house, $710 without; $639 with.

Foundation for tower scrubbers, $7,854; no depreciation. That is all.

Q. Now in arriving at the valuation which you have given
1622 with regard to these buildings did you use the same formula as you did with regard to the other buildings in the other plants?

A. I did.

Q. Adopting the Kings County building as a model or standard?

A. Not as a model or standard but as a normal condition, to which in each instance where the actual condition differed from a normal one, the difference was added.

Q. You did not mean to be understood as saying that all the plants which you have examined are in perfect condition, do you?

A. No, where they were not I have noted their depreciation.

Q. In figuring up the price of the brick walls in this plant, by what process did you arrive at their valuation?

A. I gave that several times in my testimony, by figuring the excavation and the brick, and stone work where there was such in the walls, separate.

Q. For instance, in this plant, what valuation or price did you fix on a thousand brick or brick per thousand?

A. $25 per thousand laid.

Q. And did you adopt the same figure regarding the laying of brick at all the other plants, where brick walls were concerned?

A. I did.

Q. At the present price of brick per thousand?

A. I gave that once before how that was made up in detail. Do you wish to hear it again?

Q. Yes, I would like to hear it again.

A. The price of brick obtained varies from $8 to $12. I took the average price of $10. For labor: Bricklayers, 800 bricks per day, $7; helper, $4; Portland cement, $2.25; sand and water, $0.80; foreman, at the rate of $7 per day, $0.50; timekeepers, $0.20; hod hoisting, $0.50; scaffolding, $0.16. Making a total of $25.41, for which I applied $25.

Q. Did you observe whether there was any vacant land surrounding this plant at 14th Street, belonging to the Consolidated Gas Company?

1623 A. Vacant land? There was I think on the north side of 16th Street, where there was room for another coal yard, to which I have already testified as being supplied with foundations for a coal trestle for coal handling machinery.

By Mr. MATHESON:

Q. Which is now used as a *cold* storage yard, is it not?

A. Now used as a *cold* storage yard.

By Mr. BURR:

Q. What is the size of that yard, do you know?

A. No, sir, I could not tell you.

Q. Is there not room for an extension of the plant at 14th Street?

A. No, sir.

Q. At what plants is there still room for an extension?
A. At none.
Q. Have you made a diagram showing the location of these buildings at each of the various plants?
A. No, sir, I have not.
Q. Then how are you able to swear that there is no room for an extension of the plant at any one of those locations?
A. From my general knowledge as a gas engineer all that it is necessary for me to do is to go through a plant and I could see at once whether there is room for an extension or not.
Q. Do you wish to be understood as saying that there is no vacant ground attached to any of these plants?
A. I was not impressed with the fact that there was sufficient room at any place to make a notable extension.
Q. A notable extension?
A. Yes, sir.
Q. What do you call a notable extension? The erection of an additional plant?
A. No, but an increase of from 30 to 50 per cent. of the present capacity.
Q. 25 per cent. you would not call a notable extension?
A. No, not in large plants.
1624 Q. So that we may say that there is room for an extension of say 25 per cent. on each of those plants?
A. No, you cannot say that at all. On the contrary, I do not think there is any room for any extension; that is what I said before.
Q. You said you did not think there was room for any notable extension.
A. Yes, that includes the first 25 per cent.
Q. Would it be a difficult job to map out or plot out on this Complainant's Exhibit Number 48 the location of each of the buildings at the various plants that you have testified regarding?
A. Not at all; it would not be difficult, no sir.
Q. I would like to have you do that.

Mr. MATHEWSON: No, I shall not ask this witness, who is not called for any such purpose, to do that, and while it may not be a difficult job, it would be a job of exceeding length; it would require surveys and everything else. I do not think you appreciate what it would mean, Mr. Burr.

Mr. BURR: Would you allow us to do that?

Mr. MATHEWSON: That is another proposition. I am not on the witness stand.

Q. Then you decline to do so by advice of counsel?
(No answer.)

Mr. MATHEWSON: I am not his counsel.

Q. Could you substitute nine retort benches for six retort benches in any cases?
A. No, sir, I could not.
Q. Could you, with the existing land and buildings in the bor-

ough of Manhattan, increase the capacity of a coal gas works, by substituting nine benches instead of six, as now?

A. I think it could be extended, at a comparatively tremendous cost.

Q. Will you explain a little further what that compara-
1625 tively tremendous cost would be? What you mean by that?

A. The buildings would have to be changed to a certain extent, in order to accommodate benches of nine, with full depth generator furnaces and charging and drawing machines, which would cost very much more if the plant was built outright new in a different location.

Q. Then, do you consider that the locations occupied by these plants are not favorable locations?

A. No, not at all. If I had to build that plant over again new, of course, as I said, I would construct it differently, for the full capacity that it is now. For that particular district where that plant was originally intended to supply gas, the location was very favorable.

Q. Would you say, that taking all these plants together as a whole, they are up to date construction?

A. I have said the other day that if I was to construct them new for full capacity, I would construct upon different lines than those laid out, which is due to the fact that they were built in small units at the time and added to from time to time until they finally reached their present capacity, but if built for the whole capacity the basis of construction would be an entirely different one of course.

Q. Would you say that these plants are in the most efficient condition, all of them, including the 111th and 114th Street?

A. I said before there was no manufacturing plant on 111th Street.

Q. I am speaking of it as a distributing station or plant, as you choose to call it. Embracing all the plants here, of the Consolidated Company, would you say that they are in most efficient condition?

A. Manufacturing plants you are talking about?

Q. Yes.

A. All the manufacturing plants are in as perfect condition as
they can be under the circumstances under which they were
1626 developed to their present size.

Q. And those circumstances under which they were developed to their present size did not operate to make them up to date construction, did it?

A. Why no, it could not be so, because some of those plants originated away back in the fifties, when the plants as used to-day were not known, and the buildings were arranged for that character of apparatus. In order to change them, as I said before, it would cost tremendously to do it on the present site as compared with a new site.

Q. Is there anything to prevent the company from taking these plants one by one and reconstructing them and bringing them up

to date, as far as construction is concerned, and increase the capacity of each one as it is rebuilt?

A. There is no chance for any decided increase in capacity. As I said before, they can be improved with modern apparatus, but it would cost a great deal more to do it on the present site, as compared with a new site.

Q. When you speak of the new site, you are speaking of the site on which you are engaged in erecting the plant at Astoria?

A. No, I was not. I say a new site, any new site.

Q. Any new site?

A. Yes, sir.

Q. What was your estimate of the cost per cubic foot contents of a retort house?

A. Under normal conditions, as in the instance of the Kings County works, 14.05 cents per cubic foot.

Q. Under normal conditions?

A. As existing in Kings County.

Q. Do you claim that those conditions exist here in the Borough of Manhattan?

A. Quite to the contrary; in most instances I found that they varied considerably; in many instances there were excavations in rock and in many others pile foundations were necessary, owing to the locality. That changed the normality of the conditions,
1627 and in that case I figured the abnormality separately and added that to the cost of the retort house as determined by the application of the unit price of 14.05 cents per cubic foot.

Q. Can you say how old the turntables were that you have testified regarding, Mr. Mayer?

A. No, sir, I cannot.

Q. Can you tell me what the life of a Root exhauster is?

A. No, I cannot. I never knew one to wear out outright. Those apparatus have always to be maintained in such condition of repair that they do their work, and therefore the repairs always keep up the depreciation.

Q. What is the life of a boiler?

A. Well, that depends upon the handling of the boiler, the character of the coal and a great many other conditions and circumstances which prevent one from applying a general rule.

Q. Could you say what the life of the turntables are?

A. The life of the turntables?

Q. Yes, or the life of a turntable.

A. What I said before regarding the exhauster applies to the turntable and all other apparatus in a gas works. In order to perform their function each and every day they must be kept in perfect repair continuously.

Q. I understood you to say that in making an estimate of value for some of this work, that you sought figures from contractors, and those who made special articles; is that true?

A. I would not call them contractors; I would call them manufacturers.

Q. The manufacturers?

A. Yes, sir, that is, manufacturers of special articles which nobody else makes.

Q. Did you get more than one set of figures for any one article?

A. I could not very well do that, because the article man-
1628 ufactured by one manufacturer is not manufactured by another one.

Q. You asked the manufacturer of a particular article what he would supply that particular article at?

A. Yes, sir.

Q. That embraced the delivery and setting up of the particular machine?

A. No, that only included the delivery.

Q. And then you added what you thought would be the proper figure for setting up?

A. For the erection, yes, sir; that is, not what I thought to be a proper figure, but what I knew to be the proper figure.

Q. Well, you are merely expressing an opinion here, isn't that all?

A. No, I am expressing my knowledge from past experience.

Q. Now, I will ask you from your past experience and your present knowledge whether you can state accurately the extreme daily capacity of the 14th Street station from your own computation?

A. No, I cannot. I have not figured the sizes of the apparatuses in order to establish the total amount of capacity, but I know that such an amount of gas per day has been produced in those particular stations in each and every one of them many times and in some of them they have not quite come to the maximum and in others they have gone beyond the maximum.

Q. Would you swear in the 14th Street station, for instance, that they had reached the maximum capacity there and they could not produce more?

A. 14th Street you are talking about?

Q. Yes, sir.

A. Yes, sir, as I recollect, at 14th Street they had produced the capacity that I stated the plant to have, within a small fraction.

Q. Well, what I am asking you, Mr. Mayer, is whether you wish to be understood as saying that they could not produce more than the figure you have given? I want to know whether that is
1629 really the maximum capacity of that plant, or whether it is not the fact that more gas could be produced there than the maximum that you have given?

A. If you ask me that question, I would have to figure the capacity of each and every apparatus of the plant before I would be able to make a decided answer.

Q. So therefore the capacity which you give to each one of these plants is not the capacity arrived at from your own computation?

A. No, sir, it is the capacity which was given me by the various superintendents.

Mr. MATHEWSON: It is already on the record and has been testified to.

Mr. BURR: It is not on the record that this capacity was not the result of his own computation.

Mr. MATHEWSON: No, but the capacity is already on the record as testified to by Mr. Bradley and he took the same capacity as Mr. Bradley did.

Q. Mr. Mayer, you have stated that the 111th Street coal gas works of 2,500,000 feet daily capacity, or 500,000,000 feet annual capacity, are lying idle, and I want to ask you, could not those works be completed and more than doubled in capacity, at a reasonable expense?

Mr. MATHEWSON: He has not testified to any such thing as that, Mr. Burr; I am quite sure he has not.

A. I have already stated in connection with my testimony for that plant that the benches in this plant could not be used except in connection with some other station, where there were exhausters, condensers and purifiers.

1630 Q. Isn't there room to put exhausters, condensers and purifiers?

A. Nothing like for the capacity of the benches. I presume that a portion of that ground was taken from the other side which has now been converted into a holder storage yard.

Q. When you say the other side, to what do you refer?

A. The other side of First Avenue.

Q. Insn't there room on this block bounded by 110th Street, 111th Street, First Avenue and Pleasant Avenue, for the construction of the additional buildings which would be necessary to increase or practically double the capacity of that plant there?

A. Nothing like it, because you would have to provide for a coal storage at the same time if you supplied such a large plant as that. It would be altogether too small.

Q. It would be altogether too small?

A. Yes, sir.

Q. What space would be required in your opinion, to enable that plant to be doubled in capacity.

A. There is no plant there now; there is only a retort house there, only a part of a plant.

Q. I mean the buildings which would make it a plant capable of doubling the capacity which you say it has the ability to provide each day now.

A. I beg your pardon, I did not say there was any ability to produce any amount at that works except in connection with some other works where there are exhausters, purifiers and condensers. Upon this station there is only part of a plant, only the generating plant consisting of the retorts and benches.

Q. I asked you what space additional beyond what is here now used by the Consolidated Gas Company would be required to put up those buildings you speak of, the exhausters and condensers.

Mr. MATHEWSON: And provide for coal and coke storage?

The WITNESS: A plant not less in area than the 14th Street works, which is 5,500,000 cubic feet.

1631 Q. Which of the holders are the more recently constructed?

A. This one at 132d Street.
Q. And what is the holder that is next to that?
A. 111th Street, I think, the two at 111th Street.
Q. Did your firm build the one at 132d Street?
A. Yes, sir.
Q. And also build the two at 111th Street?
A. Yes, sir.
Q. And what other holders did your firm build?
A. Here in New York?
Q. Yes, in Manhattan.
A. Well, we built holders for all the companies more or less, and particularly all the large holders, every one of them without exception. We built formerly the holder in brick tank at 63d street. We built another one at 65th Street, I think of 4,000,000 and 3,000,000 cubic feet capacity respectively; and a great many others which I cannot recall just at the present moment as to location.
Q. Now, you say you took the rate of wages, shop and field, from your construction work?
A. Construction accounts.
Q. To what construction account do you refer?
A. To the construction account of the firm of Bartlett, Hayward & Company.
Q. How recently?
A. To date.
Q. Were these construction accounts made in connection with the construction of any particular plant?
A. Every one of them; when a particular contract is finished we know to the thousandth part of the cent; we know every mill that has entered into that construction.
Q. You say that in connection with the boilers of these various plants regarding which you have testified and given a value, you cannot say when any of them were first used. You don't know the life of the boiler, in other words?
A. No, I did not make any inquiries regarding that. I
1632 found that they were all in perfect condition and operated to the full pressure allowed them, and as this was not a low pressure in any instance, there was no reason for making any further inquiries. If any defects are developed, they are at once made good.
Q. Then you can fix depreciation without knowing when they were originally in use?
A. The same as I can with an engine or any other apparatus, the general appearance of that apparatus indicates to me the approximate depreciation I should allow as a practical engineer.
Q. Are you engaged now in any construction work in Astoria?
A. I am not, no, sir.
Q. Have you finished all that?
A. My firm is. I have severed my connections with the firm and therefore I answer your question in that way.
Q. And you left the firm in July last?
A. I left the firm actually in December last, but practically on May 1st.
Q. When did you start in to appraise these plants?

A. Oh, I don't know, about seven or eight weeks ago, I don't recall the exact date. I have the exact date but could not tell it just offhand. I think it was [illegible]nd about the 8th or 10th of July. I think it was the 8th of July if I remember rightly.

Mr. BURR: That is all I want to ask.

By Mr. PAGE:

Q. I intended to get, if Mr. Mayer was willing to do so, a statement bringing together the different coefficients at which he estimated the prices and cost?

A. Do you mean a copy of this paper?

Q. I don't know what that is.

A. Those are my coefficients of cost or my factors in making up the coefficients.

Q. That is what I meant, one statement.

1633 Mr. MATHEWSON: Do you mean as to each one of these various apparatus he has testified to?

Mr. PAGE: Yes, his prices on which the coefficients of cost were based.

Mr. KIRBY: And materials entering into the construction.

Mr. MATHEWSON: Hasn't he stated them already?

Mr. PAGE: He has stated some of them. I mean how he arrived at that.

The WITNESS: I have given you all the material cost for the apparatus and given you the holders and condensers.

Q. Have you given what it cost for cast iron?

A. I think I have given you the cost of cast iron and wrought iron condensers and purifiers in detail, I think in my testimony already.

Q. What is there that you have not given?

A. That is all that I recollect at the present moment. All the others I have not given, but they do not vary much in character.

Q. Have you used the same price for cast iron, for instance, in all apparatus?

A. Yes, sir, I have stated that my price for cast iron is based on the material, to which must be added the melting of the iron in the cupola, and to that is applied my unit for cast iron. It is the same thing in each and every instance, because it only represents the iron in a melted condition ready to leave the cupola.

Q. Have you given the wrought iron?

A. I have given you the price to-day. The prices are the prices quoted by the mills.

Q. That applies to all kinds of apparatus, doesn't it?

A. To all kinds of apparatus, yes, sir.

Q. And steel the same way?

A. Steel the same way, yes, sir.

Q. Whether it is steel plate or whether it is steel in bars?

1634 A. I have given you the prices for the bars and for the plates and for the mill plates and for every kind of plate separately.

Mr. PAGE: All right, I will withdraw the question if you think it is sufficiently on the record.

Redirect examination by Mr. MATHEWSON:

Q. Mr. Mayer, has your firm of Bartlett, Heywood & Company, and have you, as their chief engineer, constructed gas plants complete, including buildings, apparatus and yard connections and holders?

A. Yes, sir, quite a number of them.

Q. So that you are familiar with the construction and the cost generally of all these different parts of a plant?

A. Generally and in detail.

Q. Referring to your valuation of buildings, you stated you took as a standard the cost you had derived of one building of the same character, say a retort house, and you applied that to another retort house and computed the value of the second retort house upon a proportion between cubic contents of the two?

A. That is right, sir.

Mr. PAGE: I prefer that the witness should state it rather than have counsel testify.

Mr. MATHEWSON: He has already stated that, and I am only reciting it as a preliminary to a question.

Mr. PAGE: All right, I was just calling attention to the fact. I do not press the objection.

Q. If you have one building 50 feet by 50 feet, a retort house, and compare that with a building 100 feet by 50 feet, is it not a rule that the larger building——

Mr. PAGE: Had you not better say what is the rule?

Mr. MATHEWSON: No, I do not think so.

1635 Q. (Continuing:) should have partitions or buttresses of trusses or thicker walls at the base or something else in order to preserve the same structural strength as the smaller building?

A. Yes, if you remove the partition and double the building, it becomes necessary to obtain the requisite resistance, which a partition wall would have had had it been permitted to remain in place, by some other means; and those means are either the increase in the thickness of the walls, or pilasters or increase in the thickness of pilasters or the addition of buttresses in the middle of the wall.

Q. Did I understand you to say that in the buildings you included the foundations of apparatus also?

A. In my unit prices of buildings?

Q. Yes.

A. The foundations of all apparatus in that particular building are included.

Q. I want to ask you whether this method of computing the value of one building by taking the standard derived from the cost of a similar building and comparing their cubic contents is one which is employed or recognized by engineers outside of yourself?

Mr. PAGE: I object to it as immaterial and irrelevant.

The MASTER: I will allow it.
Mr. PAGE: Exception.

A. I have very often in discussing prices of buildings with other engineers and with builders and contractors, heard the same rule applied. It is a quick method of arriving at practically a correct figure for an aggregate number of buildings.

Q. Have you ever compared in your experience the results of estimates made in this manner with the actual cost of the structures as they turned out?

A. In all my construction records, when the same are fin-
1636 ished, I convert the actual cost of the buildings upon a basis of this kind, that is, I establish the actual cost upon a basis per cubic foot of contents.

Q. According to your experience how do those compare with the actual cost, the estimate made in this manner?

A. Absolutely correct, for present conditions.

Q. Why didn't you, Mr. Mayer, in this case, proceed to take the measurements and compute the cubic feet in buildings and foundations and so on, instead of pursuing the method which you have in estimating the value of these buildings?

A. To do that, it would have really meant to make a detailed estimate based upon plans and specifications, therefore such a method could not be applied in this instance for the reason that I should have had to make detailed plans and specifications before I could make an estimate of that kind. To do that it would have taken not less than nine months for all the buildings in the various plants which I have examined; besides which I was satisfied that the method which I applied was just as correct for the aggregate number of buildings as it would have been by making detailed drawings and plans and specifications of each building.

Q. Where you or your firm is called upon to make a bid for the construction of buildings, are not the specifications and dimensions all presented to you so that you have the material before you upon which to compute the cubic feet of brick, and so forth, where bids are asked?

A. For bids in connection with gas works we generally design the buildings ourselves and submit them to the various builders and obtain the prices from the various builders ourselves, therefore, I have the intimate knowledge that I do have as to what the buildings would cost if constructed by other contractors.

1637 Q. Referring now to apparatus. Is you firm a constructor of gas apparatus?

A. We, are, sir.

Q. You are not contractors alone, but manufacturers, as well?

A. Yes, sir.

Q. What proportion of the apparatus of the gas plants as they are here are manufactured by your firm, or can be?

Mr. BURR: When you say "here," you mean——
Mr. MATHEWSON: New York, of course, Manhattan.

A. All with the exception of a few apparatuses of special construc-

tion, such as engines, exhausters, blowers, and boilers; and in the instance of a water gas plant, the generating apparatuses, which we always purchase from the United Gas Improvement Company, considering them the best in the country.

Q. What per cent. of the apparatus in a plant of this kind would your firm be able to manufacture?

A. I should say 90 per cent. and over. I believe I could say 95 per cent. and over. Perhaps in the instance of a water gas plant, the percentage would reduce to 85 per cent.

Q. In making your estimates of the cost of apparatus to which you have testified where that apparatus is manufactured by Bartlett, Hayward & Co. did you proceed upon the same basis as you would if you were submitting a bid?

A. Absolutely the same basis.

Q. Do you proceed in that way upon the basis of weight?

A. Yes, sir.

Q. And in valuing all these pieces of apparatus to which you have testified, have you gone into the same detail in estimating the value, that is, the cost of the raw material, the shop labor, the labor in setting up, and other things that you have testified to in respect
1638 to one or two items regarding which you were asked?

A. I have and I could not do otherwise. I could not go to a work and value approximately a piece of apparatus to save my life, I am so used in making detailed estimates.

Q. Have you seen yourself all the apparatus you have valued?

A. Every one of them.

Q. Now, in reference to this estimate by weight, is it possible where you estimate apparatus or machinery for you to determine the weight?

A. Yes, sir.

Q. With what exactness?

A. With absolute exactness.

Q. In other words, the weight of cast-iron or steel is substantially uniform, isn't it, for the same volume?

A. Per unit of surface or volume, yes.

Q. So that would you consider the weight of the apparatus to which you have testified as an estimate or as an exact thing?

A. As an exact thing.

Q. And you then apply this cost of cents per pound figured out in the details to which you have testified?

A. Yes, sir, and it makes it equally as exact as the weights.

Q. How do you regard the 15 per cent. profit which you have added for contractors? Is that an excessive or an ordinary profit in your experience?

A. I have only added 15 per cent. profit, you say?

Q. 15 per cent. for the original contractors.

A. For the profits?

Q. Yes.

A. Well I consider that as an extremely low profit, but it is all that can be obtained under the present conditions of competition, and in my opinion it should not be less than 20 per cent. in order to get out whole out of the contract.

Q. Have you and your firm bought during the past year considerable apparatus of a special character which is not manufactured by you; that is to say, boilers and so on, to which you have referred?

1639 A. Well not a great deal because that is such a small percentage of the total plant.

Q. But you have had experience in buying that, have you, so that you know the value generally?

A. Oh, a great deal of it, particularly in the instance of the exhausters and blowers. Not so much in the instance of the boilers because that is an article anybody can buy in the open market, in any locality.

Q. And in making up your estimate of that part of the apparatus did you apply to the manufacturers to give their figures, to confirm your own impressions, or otherwise?

A. I did; and as I said the other day they were low figures because they have to give us lower figures than they do the gas companies.

Q. I want to ask you whether the 10 per cent. which you have added to these costs and which you stated covered the engineering expenses of the company in installing the plant and the sewering of the plant and other items, is recognized by engineers in general as an additional charge to make up the total cost of the plant?

A. Yes, sir.

Q. Did you say whether you made a personal investigation of your own records to find out whether that was a proper figure?

A. I did.

Q. And what was the result?

A. It was nearer 15 per cent. than 10 per cent. That includes all the charges I have enumerated in the first or second day of my testimony; of the items, I should say.

Q. And to holders you added only 5 per cent.?

A. Only 5 per cent.

Q. For that item?

A. Yes, sir.

Q. Now, as a matter of fact in your experience, is a plant which has been built up for the last sixty or eighty years to supply gas, being increased in capacity from time to time as the requirements of the consumers increase, in any instance exactly the same

1640 as a new plant which you would install for the full capacity if you were to do it over again to-day?

A. No, sir. If I should build a plant for the full capacity it would be built on different lines.

Q. But where a plant is built up in this way, is it ever possible to get it exactly on the lines as you would produce it to-day new?

A. Not at all.

Q. Did you observe the plants in operation as you went through them?

A. I did.

Q. You observed whether they were operating efficiently and simply.

A. Yes, sir.

Q. And wherever you found anything not in use, have you so noted it and testified?

A. I believe in every instance, as near as I could.

Q. Would it be economy, for instance, having benches of 6's operating properly, to tear those benches out and put in 9's because the consumption had increased?

A. No, it would not in these plants, for the reason that the benches of 9's would require entirely different areas than the benches of 6's, and that would in all probability entail a loss in capacity instead of an increase for the reason that the benches of 9's would have to be constructed upon the same foundations as the benches of 6's and these foundations may be entirely inadequate to support the same capacity in benches of 9's.

Q. You have spoken of benches with regenerative furnaces and spoken of the regenerative furnaces as being somewhat economical. What is the comparison in cost between regenerative furnaces and the ordinary furnace?

A. I figured these, as near as I can remember now, for benches of 6's of ordinary construction, at $2,210, I think I gave the price or the value. The same bench with the full depth regenerator furnace would cost to-day $5,600.

Q. In other words, more than twice as much?

A. More than twice as much.

Q. You have been asked in reference to steel tanks and
1641 brick tanks. How long has steel been used in the construction of gas tanks for large holders?

A. I should say about 18 years; 18 to 20 years.

Q. So that prior to 1884, tanks had not been constructed, had they, of steel?

A. There was no steel made at that time for such apparatus.

Q. Have you computed, or added together, your figures so as to show the cost of reproduction of these plants of the Consolidated Gas Company as they now exist, reproduced new, without allowing for depreciation?

A. Yes.

Q. Just give me the grand totals.

A. For the plant, $12,537,262; for the holder stations, $3,600,215, making a total of $16,137,477.

Q. That is exclusive of the 18th Street plant, which has been taken by the City?

A. Yes, sir, exclusive of that 18th Street plant.

Q. If each plant were to be reproduced, I suppose it would be necessary to reproduce them new? You could not reproduce depreciated plants?

A. Not very well.

Q. And wherever you observed any deterioration in this apparatus in going over it, or any machinery, did you in every case note it, and have you included it in your figures?

A. Wherever there was any I have included it.

Q. You were questioned as to whether the plants of the Consolidated Gas Company could not now run continuously at their maxi-

mum daily capacity. Do you mean that they could run every day in the year at the maximum daily capacity?

A. Every day in the year. But what I mean by that is in gas works construction we always base a yearly production on a period of two hundred days. All my references to capacities are based on that factor, that is, 200 days per year instead of 365 days.

Q. You would have to have time down for repairs, wouldn't
1642 you, in the plants?

A. Yes, sir, and that is taking up the balance of the time.

Q. And during the summer season of course there is no requirement for the maximum output of the plant?

A. No, sir, there is not.

Q. And then the maximum annual output of these plants would be obtained in your judgment, would it not, by multiplying the maximum daily output by 200?

A. Yes, sir.

Q. Are you able to state generally whether the cost of buildings is greater to-day than it was in 1884, or less?

A. As compared with 1884?

Q. Yes.

A. The cost to-day is considerably more than in 1884.

Q. How about apparatus, speaking generally, if you can state?

A. A great many apparatuses cost less to-day. The reason for that is that in some of them or many of them the patent has expired and no royalties are to be paid to-day, and in other apparatuses the competition at 1884 and previous to 1884 was such that enormously high prices could be asked at that time which is not the case now. I know that ordinary bench castings have been sold for a price at least 60 per cent. higher than you are able to obtain for them, at the present time, which was only due to the fact that competition was exceedingly small.

Q. Is your firm of Bartlett, Hayward & Company a large producer of gas apparatus, or small?

A. We employ at present in the neighborhood of 2,000 men and have been doing that almost continuously for several years.

Q. Do you know how they compare with other manufacturers as to amount of manufacture; as to output?

A. Bartlett, Hayward & Company manufactures very much more than any other manufacturer of gas works in this country.

Q. How about the construction of gas works and appara-
1643 tus. How do they stand as to amount?

A. The same condition applies there.

Q. They are the largest constructors in this country?

A. Yes, sir.

Q. Referring to the 14th Street plant, you spoke of $48,000 for purifiers in the large house, or about that. Did that include the center seals?

A. Yes, sir.

Q. Are you sure about that?

A. Yes, sir, but not the connections between the center seals and the purifiers. Oh, I beg your pardon, what did you say, 14th Street? It is possible I may have given the senter seals extra.

Q. Well, I would like to know?
A. Yes, sir, center seals are included.
Q. In reference to the 21st Street plant, which is now a water gas plant, you stated, I think, that the buildings were now crowded with water gas apparatus?
A. Yes, sir.
Q. And you were asked if whether buildings were to be constructed now they could not be constructed for less. If you were asked to lay out and plan a water gas works of same capacity as 21st Street to-day and had the room, would you confine yourself to the buildings at 21st Street, or would you build larger ones?
A. I would build larger ones.
Q. With more space?
A. More space, yes, sir.
Q. And more expensive buildings?
A. And more expensive buildings, yes, sir.
Q. Do you know that the capacity of the 21st Street works has been increased since it became a water gas works much beyond what it was as a coal gas works?
A. Yes, sir.
Q. When you speak of $123 per thousand as the value of the water gas plant, do you include any holders in that?
A. I do not.
Q. What do you include?
A. Only the plant itself, without any holders.
1644 Q. Generating plant?
A. Generating and purifying plant, condensing plant, the entire plant except holders.
Q. Does it include the general connections?
A. Yes, sir, everything except the holders.
Q. The term operating plant was used in asking you some questions in reference to these various plants of the Consolidated? Are not all of them operating either as manufacturing plants or as distributing stations?
A. Yes, sir.
Q. When you use the term "operating" what do you mean?
A. Manufacturing. I do not recall now how often I used that and just in connection with what statement, but I do believe under the term of the operating plant I should mean a manufacturing plant, that is a gas producing plant.
Q. You were questioned as to a building at 18th Street enclosing some holders there. Is that form of construction, enclosing holders in a building, in use anywhere to-day?
A. No, I believe it has been universally abandoned, even in severer climates.
Q. Was it formerly a construction that was recognized by engineers?
A. Well, yes, it was used many times. I have constructed some of those buildings myself.
Q. Does not that reduce the cost of taking care of apparatus inside?
A. Yes, sir.

Q. Saving the expense of cleaning snow off the holders and doing various other things?

A. It was not so much the expense entailed in cleaning the holders from snow, but at that time it was considered dangerous or almost an absolute impossibility to clean holders in severe climates as Canada or Chicago from snow during heavy storms. By better and improved construction of the holder recently we have applied complete stairways extending from the ground level to the top, so any portion of any holder, no matter how large, can be conveniently
1645 reached by the men that go on top to shovel off snow.

Q. Is there any wall around outside of this building at 18th Street, or does the building form the wall between the premises and the street?

A. Well, just the side walls of the building of course from the enclosure for the holders.

Q. So that if the buildings were not there at all and were roofed would there not be any necessity for a surrounding wall to surround the enclosure?

A. I don't understand you.

Q. If there were no building there roofed in, would there not be required a wall to surround the premises, that wall now being part of the building wall?

A. That wall would be very much lighter and, of course, very much lower.

Q. Oh, of course, but there would be some requirements for a well or some method of enclosing the premises?

A. Yes.

Q. Is it feasible or desirable in your judgment as an engineering proposition to have a single unit or plant to produce 41,500,000 cubic feet of gas daily, or is it necessary to have units in that case?

A. You mean as an entire plant?

Q. Yes.

A. Including purification, condensation and everything that makes up a plant?

Q. Yes.

Mr. PAGE: A water gas plant.

Mr. MATHEWSON: We are talking about gas in general. We will come to that later.

Mr. PAGE: My question was directed to the water gas.

Mr. MATHEWSON: I am questioning the witness now. Mine was not.

A. No, I should consider that not only as improper, but as a very expensive method of building a large gas works.

1646 Q. What, in your judgment, would be a fair limit of the capacity of a single unit daily?

A. The same limit as applied in the new works for the Astoria Light, Heat and Power Company; that is 20,000,000 feet per day, for coal gas.

Q. And after you pass that limit, isn't each unit in effect a new plant?

A. Yes, sir.

Q. Would there be in your judgment any special economy in the production of gas after you had reached an output of say 600,000,000 or 700,000,000 feet a year for any increase beyond that?

A. No, in my opinion there would be absolutely none, for the reason that when you arrange a plant of say 20,000,000 feet capacity so that your manual labor and your machine labor are continuously employed during a certain time entirely, in other words, if you get all out of the manual and machine labor that can possibly be obtained that limits the capacity of your plant. Will you excuse me. I just want to correct that. I won't say limits the capacity; I will say determines the limit size of the plant.

Q. Do you remember what the discount was which you allowed upon the construction of a single holder by reason of the contract for three or four 5,000,000 cubic feet holders? Do you remember the percentage, whether it was 1 per cent. or 2 per cent., or what?

A. No, I have not figured that on that basis at all. What we allowed was of course that reduction in the material for the four holders. Of course it is quite an inducement for the mills to make a special price when they get an order for such a large amount of material.

Q. Do you remember whether the reduction was slight or a very large one?

A. I cannot recall just how much that was, but it was very nearly equal to the difference in the cost and the difference in the valuation and that of actual cost, with the exception of the labor item to which I referred before.

Q. In practical construction would you be called upon to
1647 build at the same time all the holders that now belong to the Consolidated Gas Company, under any conceivable circumstances?

A. Absolutely impossible. I could not make the schedule to order the iron or steel at the same time so as to make an inducement to the mills to reduce the price.

Q. And holders are constructed as additional requirements for them arise?

A. Yes, sir.

Q. Increase of consumption?

A. Yes, sir.

Q. And new distributing stations?

A. Yes, sir.

Q. You have given a total value for the 99th Street plant of nearly a million dollars. Will you state how much of that is presented by you as the value of these hydrogen scrubbers respecting which so much time has been taken?

A. You mean how much of the total?

Q. Yes, as to how much those hydrogen scrubbers stand for?

A. At 99th Street?

Q. Yes.

A. $1,560 without depreciation; $1,485 without the 10 per cent. and 5 per cent.

Q. $1,485?

A. Yes, sir.

Q. Now, in reference to the scrubbers, in the manufacture of coal gas, is it not the fact that scrubbers bear some rather fixed relation to the amount of gas which passes through them or which has to be scrubbed?

A. Yes, sir, that is a fact.

Q. You have said, however, in relation to the water gas, that there must be a minimum provision for the scrubber, but after you get beyond that, isn't it largely a matter of discretion in the operator as to the kind of scrubbers that shall be used? Is there any such fixed relation as there is in connection with coal gas?

A. No, there is not.

Q. I finally ask you whether from your observation of these plants, knowing that they have been built up during the last sixty or eighty years, you consider the plants as efficient and in good condition or otherwise?

A. I believe I have already stated that in my testimony. I
1648 think that all of the plants that are operated to-day for the manufacture of gas are as perfect as can be made under the conditions under which they were built and developed.

Recross-examination by Mr. PAGE:

Q. Would you place the same limit of capacity for a profitable reproduction of gas works, or a water gas works, that you have on a coal gas works of 20,000,000 cubic feet per day?

A. No, I should increase the total capacity per unit of plant very considerably.

Q. You could construct one plant that would produce 41,500,000 cubic feet of water — per day?

A. Very easily, but it would contain a multiplication of units of even smaller generating capacity than I had in my mind when I gave the limit of capacity for a coal gas plant as 20,000,000 for the simple reason that a water gas apparatus for 5,000,000, 10,000,000 or 15,000,000 cubic feet per day, is a self-contained apparatus in itself all the way through; whereas in a coal gas plant, you have to have a certain number of benches, and that changes the conditions entirely, so that a water gas plant could be almost increased to any total capacity by simply adding those additional smaller units one alongside of the other.

Q. So that there is practically no limit to the economical production of any one plant of water gas, no limit of capacity I mean?

A. No, you could keep on adding water gas apparatus and call each one of them a unit of the total plant, providing you were to increase your purification in the same ratio in proportion to the generating apparatus, it would really mean a multiplication of smaller units than in the instance of the coal gas plant.

Q. That is, it requires less purifying capacity to purify water gas than it does coal gas.

A. No.

1649 Q. That is, you can purify more water gas than you could coal gas with the same purifying boxes?

A. No, sir, I said just now when you come to the purifiers, you

have to build your purifiers in proportion to any accepted number of units that you might call a plant.

Q. As I understand it, you have taken as a unit or maximum unit which you can use in a coal gas plant, one that produces 20,000,000 cubic feet of coal gas?

A. Yes.

Q. Now, what is your maximum unit of capacity of water gas plant?

A. Well, I should say that you could build a water gas plant of double that capacity and call it a unit, provided, as I said before, that your purifying apparatus and all other apparatus are in proportion to the generating plant.

Q. Then you could very easily construct a coal gas plant of a capacity of 20,000,000 cubic feet per day and a water gas plant of 40,000,000 cubic feet a day, making a total capacity of 60,000,000 cubic feet?

A. Yes.

Q. Now, you spoke as if the maximum of your capacity was 200 days.

A. 200 days, yes, sir.

Q. It is not required merely for the purpose of repairs and renewals that a plant should be shut down for 165 days in the year, is it?

A. No, sir, the 165 days means that it takes care of the wear and tear and necessary repairs besides the variation in gas production between summer time and winter time. If you average the total you will find it is about applicable for two hundred days a year.

Q. Now if you had a condition where the summer demand equalled the capacity of the works, could you run the works right through the summer?

Mr. MATHEWSON: An impossible assumption.

Mr. PAGE: Not at all.

Mr. MATHEWSON: Yes.

1650 A. Could I run it through the Summer?

Q. Yes.

A. You mean to say six months?

Q. Could you run 300 days, we will say?

A. On a full capacity.

Q. To the maximum capacity.

A. It would be impossible; you have to have time for alterations and to replace wear and tear.

Q. How much time is it necessary to repair and replace wear and tear in a plant?

A. Well, I know that under present conditions wheer we figure the 200 days' continuous operation, that the balance of the time is used up to the last minute in making necessary repairs.

Q. Then it has nothing to do with the increase of the demands in the summer, but the 165 days are consumed in repairs; is that right?

A. As I said before, both wear and tear and the decrease in mak-

ing of gas and the demand for gas; that is all taken care of by that difference in time, being 165 days.

Mr. MATHEWSON: That has all been gone over; it seems to me it is clear enough; but perhaps it is not.

Q. You say that in constructing a gas plant it has been your custom after completing a building of any particular kind, to reduce that to a per cubic foot standard?

A. Yes.

Q. But in the estimate which you have given of the values of the buildings in this particular plant, you have used merely the comparison of the Kings County buildings? That question can be answered yes or no, I think.

A. I have applied them as a standard.

Q. Applied the Kings County buildings alone as a standard?

A. Yes, sir.

Q. Now, in giving the dimensions of the U. G. I. water gas
1651 machines as you have, have you given the same dimensions as would appear on their catalogue, where you state that it is 11 feet by 20 feet, we will say.

A. I have obtained these dimensions at the various works where I found the apparatus, and then asked the United Gas Improvement Company for the price of the apparatus.

Q. Have you taken the measurement of the outside of the shell, or did you measure inside of the brickwork?

A. No, I took the measurement outside of the shell in each and every one of the apparatus.

Q. Is that the way they catalogue it?

A. I do not know that they have any catalogue, I never saw any.

Q. You say in making your estimates of units, you have allowed a manufacturers' profit of only 15 per cent.?

A. Yes, sir.

Q. Haven't you also allowed 10 per cent. additional for contingencies?

A. I have, and in the instance of the holders I think it is 15 per cent.

Q. You stated that in your going through these plants you observed that they were operating efficiently. What did you mean by that. That they were making gas?

A. That they were making gas without any apparent difficulty, in the ordinary manner in which it should be produced. I could not see any difficulty in any way, shape or form in any part of the plant.

Q. You did not take into consideration the amount produced of gas, per pound of fuel used, or anything of that sort, that would go into the cost of operation, did you?

A. I did not examine the operating results at all.

Q. What you mean then, when you say you saw them working efficiently, is that they were manufacturing gas, and that gas was being run through the different apparatus?

A. That is it.

Q. Benches of 9, with a generating furnace, is a more
1652 economical and efficient method of producing coal gas, is it not, than it is by benches of 6 directly fired?

A. Yes.

Q. Then, did you estimate that a bench of sixes by direct fire was depreciated in value by the fact that a more modern and recent apparatus, and a more economical apparatus had come into existence when you made your estimates here?

A. I only ascertained the depreciation upon the present conditions and the appearance of the benches.

Q. That is, you took a bench of sixes produced with a direct fire furnace and compared that with another bench of sixes with a direct fire furnace that was in existence?

A. That was it.

Q. But you made no allowance or depreciation on account of the fact that a more economical or efficient apparatus was in use now?

A. I did not, sir.

Q. How did you get at your value or cost price of a full depth generator furnace at $5,000 per bench?

A. From the estimate which I only recently made, within the last two months.

Q. Is that in the City of New York, or for use in the City of New York?

A. No.

Q. Where was it?

A. Indianapolis.

Q. Can you give me the result of the computation which you made to arrive at the cost price of $5,000 per bench for a full depth generator furnace, at nine to the bench?

A. The price has not been submitted yet.

Q. I want to know the figures, never mind about that particular estimate, I want to know the various figures that would enter into a computation that would show $5,000 as the cost of the bench?

A. I know that that figure is right from my own knowledge and experience in the construction of benches, that is, for a retort 10 feet long. If it was a through retort, 20 feet, the price would be double. The price of a 20-foot inclined retort is $12,000
1653 at the present time. This would only be $11,000, being a horizontal retort of the same length, 20 feet.

Q. Then, do I understand that you cannot give the figures that would show that cost, or that you do not wish to.

A. I have stated just now that all my prices would be nearly $13,000 for a bench, 20 feet inclined retort. For a horizontal bench, a new bench would be about $11,000. The price I have given is $5,500, which is one-half.

Q. It is $5,000 as I remember it.

A. These are the regular market prices for the apparatus at the present time.

Q. You do not go out in the market to buy a bench of retorts, did you.

A. Perhaps I should not have said market prices, but prevailing prices for that kind of construction.

By Mr. MATHEWSON:

Q. Does that mean installed?

A. That means erected on foundations not including foundation. I am erecting such retort benches now in the State of Massachusetts, and I have just finished another installation in Massachusetts, at about those prices.

Q. How much more does it cost to make a full depth than half depth?

A. Well, the price for a half depth bench, ten foot long retorts, would probably be in the neighborhood of $3,500—between $3,500 and $4,000.

Q. Now, as I understand it, the only reason that it is impossible to reproduce the holders at one time is the fact that you could not make plans and specifications and get them to the works rapidly enough to secure contemporaneous construction, is *the* right?

A. That is not the reason. I can make plans and specifications in a comparatively short time, but the mills would certainly object to accepting them for all the material required to replace,
1654 all the holders in the City of New York, because it would extend for a period of five or six years, and maybe longer, and they would not give prices in advance for that period of time.

By Mr. BURR:

Q. Would you not say that the more improved a plant is in construction, the better the gas and the lower it cost to manufacture?

A. As to the quality of the gas I should say no. There is no reason why the quality of the gas should not be as good in a plant that was constructed some time ago as compared with construction to-day. As to the cost of production I should say it would be less, when you consider the application of machinery to replace manual labor in connection with improved apparatus.

Re-direct examination by Mr. MATHEWSON:

Q. Referring to the plants of the Consolidated Gas Company, only the 42nd and 14th Street plants are now coal gas, you testified. Can you tell the total capacity of those two plants?

A. 14th Street, 5,000,000 cubic feet; 42d Street, 4,500,000 cubic feet.

Q. That is 9,500,000 cubic feet together?

A. 9,500,000 cubic feet total.

Q. The total capacity of the plants to which you have testified, of this Consolidated Gas Company, is something over fifty millions, is it not?

A. Excuse me one moment. I will add it up. Fifty-one million feet exactly.

Q. So that the water gas plants would represent out of that fifty-one million how much, taking the 9,500,000 cubic feet out?

A. Well there is nearly four-fifths approximately.

Q. In feet, how much.

A. 41,500,000 cubic feet.

Q. Did you not testify that as far as those gas plants were
1655 concerned that they had the most improved apparatus and up-to-date installation?

A. I did.

Q. Do you know of any way in which they could be improved, that apparatus?

A. I do not at the present time.

Q. Referring now to the possibility in a single plant of producing 40,000,000 cubic feet of water gas per day, so long as the water gas units are distinct, would there be any particular advantage in aggregating all that 40,000,000 cubic feet together in one plant?

A. None whatever.

Q. Would it not have the disadvantage that in case of explosion or something of that sort it might put the whole plant out of operation?

A. As to the purifying capacity, that may be the case, yes.

Q. And as to blast pipes?

A. Well, yes; that might affect individual apparatus, but not the whole plant.

Mr. PAGE: I want to make a motion to strike out the testimony of this witness as immaterial and irrelevant to any of the issues here. First, that the company ought to be allowed for the plant, the actual value of a plant built to-day that would produce the same amount of gas as this plant, the same as it would cost a new company having the right to make and distribute gas in the City of New York to build a plant, disregarding the old plant entirely. And secondly, they might claim to be allowed—although I do not think under the cases they could be—the value of the capial that they have invested in their plant, and that would be ascertained by taking the original cost of these plants and adding to that the amount of capital that has been added in the way of additions since that time, and de-
1656 ducting therefrom the proper element of depreciation and allowing that value; while the evidence of this witness has been entirely directed to the reproducing today new of a plant similar to the old plant—was commercially or economically worth reproducing, as he has testified, and without regard to the cost of producing gas in that plant. Therefore all his testmony and estimates are based upon something that in no way will enter into the final consideration of what is to be allowed this company. And I move that it be stricken out.

Mr. BURR: We make the same motion.

Mr. MATHEWSON: I do not agree with the Senator's law, but it is, it seems to me, plainly relevant.

The MASTER: Motion denied; exception to all parties to the motion.

Mr. PAGE: And further, I move to strike out the witness's testimony on the ground that it is immaterial and irrelevant, the testimony being admitted on the relevancy of the replacement value, that the replacement value of the plant is not the total replacement value of each particular building and apparatus, and to this result alone does the testimony go. It should be as to the replacement of a complete plant.

Mr. BURR: We join in that motion also.
The MASTER: The same ruling and exception.

ROBERT A. CARTER, recalled and further examined, testified as follows:

Mr. MATHEWSON: Before you begin Mr. Gans I want to ask one more question, simply to complete the subject that I was examining on.

1657 You testified Mr. Carter, at the last session, as to the method upon which the valuations specified in the tax report of the company were reached. I want to ask whether that method was explained by you before the Gas Commission at the recent hearing last winter.

A. It was, fully, yes, sir.

Q. That was the first time you were called upon to testify on the subject after the Stevens Committee's report, was it not?

A. Yes.

Cross-examination by Mr. GANS:

Q. While we are on that; was that same explanation made before the Stevens Committee?

A. There was the same explanation made.

Mr. MATHEWSON: Before the Stevens Committee?

The WITNESS: Oh, no, I misunderstood the question. No, or rather——

(The question is repeated by the stenographer.)

Mr. GANS: If there is to be any qualification of it, do not let us have it stricken out. Let it stand.

The MASTER: Go ahead, Mr. Carter.

The WITNESS: The explanation that was made before the Gas Commission was made after I had had an opportunity to refresh my memory——

Mr. GANS: I move to strike that out as not responsive at all.

The MASTER: Let it go. Go on and answer.

A. (Mr. Carter, continuing.) It was made after I had an

1658 opportunity to refresh my memory as to the method that was employed in arriving at the value of the plant of the company for the purposes of that report by the chief engineer.

Q. Now, all this explanation that you have just made does not affect your answer, that the explanation was not made before the Stevens Committee, does it?

A. The explanation made before the Stevens Committee was that the value given in the tax report was the book value less depreciation, which took into account the removal of the plant to Astoria, and, as I have testified before, I had not had an opportunity at that time to refresh my memory as to the method of arriving at that value. Having done so, I testified before the Gas Commission, and have similarly testified here as to the method.

Q. Let me ask you now, was the explanation which was made before the Gas Commission the same explanation made before the

Stevens Commission. I think you have answered it, "yes," "no," and "I don't know." Let us have your final answer.

Mr. MATHEWSON: This has all been gone over at length.

A. It simply gave in greater detail than I was able to give before the Stevens Committee, the method by which the value given in the tax report was determined by the chief engineer.

Q. Then are we to understand that your first answer was right, and the same explanation was given before the Stevens Committee which was given before the Gas Commission.

Mr. MATHEWSON: Has not this reached a stage where the witness ought to be relieved from repeating over and over again?

Mr. GANS: I think, if the Master will read the testimony,
1659 he will find that the witness has given a different answer to the same questions three or four times.

The MASTER: Put them all in evidence, and let me have the benefit of it.

Q. It is not clear in my mind yet. I want to know if you, Mr. Carter, wish to be understood as having made the same explanation before the Stevens Committee, as you did before the Gas Commission of the method of which this tax report was made up.

Mr. MATHEWSON: He has answered the question fully.

The WITNESS: I think that my answer to that question has thoroughly covered the ground. That is my opinion.

Q. Now, having taken the cue from Mr. Mathewson, will you answer the question?

A. I have already testified here that I was called before the Stevens Committee from a sick bed without any opportunity——

Q. I think we have heard that several times.

A. Very well.

Q. Did you or did you not make the same explanation——

Mr. MATHEWSON: If the witness is asked the question and is pushed, I insist that he may answer in his own way.

Mr. GANS: I think it can be answered yes or no.

The MASTER: Go on and answer, but do not go over the whole subject.

A. It is answered in two words, I think, Mr. Master, that I was unable before the Stevens Committee to recall the circum-
1660 stances which attended the fixing of that value three or four years prior to the date of my examination; that subsequently to that I did refresh it and testified accordingly with the facts before me, before the State Gas Commission and have similarly testified here.

Q. So there was a difference between your testimony given on these two occasions?

Mr. MATHEWSON: He has not said there was.

Mr. GANS: Then I do not understand English.

Mr. MATHEWSON: You asked him if he made that explanation at that time and he said he did not, and now he explains why he did not.

Q. Do you say that you did not?
A. Did not make the explanation before the Stevens Committee? No. I did not.
Q. That is what I have been trying to get all through this examination.
A. You did not put it so.
Q. Is it not a fact that when you did make your final explanation before the Commission a great many days had elapsed since the time when you gave your original testimony as to the way in which the estimates had been arrived at?
A. You mean between the date of the Stevens Investigation and the Gas Commission hearing?
Q. No, as to the two hearings before the Gas Commission.

Mr. MATHEWSON: He never testified twice before the Gas Commission on that subject He only testified once on that subject; once before the Stevens Committee and once before the Gas Commission.

Q. Is it not a fact that you were asked about the matter
1661 before the Gas Commission and that you testified substantially as you testified before the Stevens Committee and that thereafter you were recalled and then gave the explanation you have given?
A. No, it is not a fact.
Q. Now Mr. Carter——

By Mr. MATHEWSON:

Q. Didn't you give that explanation the first time you appeared before the Gas Committee?
A. I did.

The MASTER: Suppose you let Mr. Gans finish his cross-examination.

By Mr. GANS:

Q. I take it you have not the books of the constituent companies showing the capital account at the time of the consolidation?
A. No.
Q. They are not produced?
A. No.

Mr. GANS: I would like to ask, for the purpose of the record, whether you will produce those books without subpœna or whether you will require us to subpœna them?
Mr. MATHEWSON: I have no personal knowledge of where the books are. It is my position that the books are not evidence against this company in any event, and that the material, if they were found, would not be material or relevant. I shall therefore leave you to your own devices.

Q. We asked you some time ago if you would prepare for us or produce the books in which were contained the data for the year 1905, which had been made up for the nominal year ending October 31st, 1905, as Exhibit 145 in the old record, and an exhibit which

has been marked for identification here, but I have not the
1662 number of it. Have you made up any such statement as that?

A. I would like to see the request in the present testimony.

Q. Well, I cannot point it out to you at the moment. It is unimportant.

Mr. MATHEWSON: I do not remember that the witness was requested to prepare any such matter as that, or that it was understood that he should.

The WITNESS: It was very clearly understood that I was not to do so, Mr. Gans.

Q. I did not so understand. An exhibit similar to Exhibit 145 in the old Commission records could be prepared by taking the data appearing in that exhibit for the two months of November and December, 1904, and the two months of November and December, 1905, and subtracting the former from the totals here and adding the latter to the totals, could it not?

A. I think that would not be all the labor involved in adapting that report to the nominal year 1905 by any means. There would be a good deal of work in it beside adding two months and deducting two months of operations.

Q. What other labor would be involved?

A. There are a great many rates and quantities and costs per unit, and other things that would have to be adapted also besides dealing with totals.

Q. As I remember, Exhibit 145—look at it again. It just deals with totals and rates.

A. Well, when you vary the quantity, you vary the rate, and it is not arrived at by deducting or adding anything.

Q. And you could arrive at the total amount expended for various purposes by that calculation?

A. I could, but I do not understand it would be an adaptation of that report through the calendar year.

Q. Well, at all events the data are in certain books of the company, aren't they?

A. They are.

1663 Q. What books would I need for that purpose?

A. The operating ledger largely would give that information.

Q. Would I need any other book?

A. I think not.

Q. Well, if you prefer not to prepare such a statement, will you bring down the operating ledger, or bring the months of October and November, 1904, and the months of October and November, 1905, to-morrow?

Mr. MATHEWSON: I do not quite understand this Mr. Master. The Accountants for the State were at our office and left a week ago last Thursday, with the statement that they had got through. They went there for the purpose, as I understand it, of dealing with such

matters as this, and I do not quite see why we should be called upon at this time to go into this subject in this way.

Mr. GANS: We will send them back and make up this statement if you prefer.

Mr. MATHEWSON: That is not the point. Ten days ago, nearly two weeks ago, they left our office.

Mr. GANS: I have been absent for the last ten days, but this is one of the matters I understood we were going to get, and that we were going to get it from Mr. Carter.

The MASTER: I suppose there is no objection to having the experts go up there and make this tabulation or whatever it is from these operating ledgers, is there?

Mr. GANS: How about that, Mr. Mathewson?

Mr. MATHEWSON: I will have to see about it. It is simply a question now, if that has all got to be done, perhaps Mr. Carter will be yanked off the stand while it is being done, while he has been up there waiting and ready to do such things. I will see
1664 how it can be done. It may be that we can do it with our own forces more readily, if it has got to be done.

The MASTER: It all depends as to developments, upon the rest of the case. This may or may not be a reasonable request. If it is going to have the effect of delaying the proceedings as a whole and delaying the closing of the plaintiff's case, then I should say it was unreasonable. If it can be done without inconveniencing anybody, or materially delaying the proceeding, it seems to me it is perfectly reasonable and proper to have that with the other tabulations that were put in.

Mr. GANS: It is the detail of Exhibit 94 which they have handed in, showing this particular year. Might I ask, sir, if you would consider it unreasonable if it involved delay simply because of the time at which the request has been made.

Mr. MATHEWSON: The Master can see what that involves. It begins there (indicating) and goes over to this next place where my pencil is. It is no small matter. My suggestion is that it is too bad, to say the least, that this has been delayed so long, if it was desired.

Mr. GANS: In response to that, I will say this, without consulting the records, that it was said at least two weeks ago and more than that, if my recollection serves me, to Mr. Mathewson, that we would desire this. Mr. Mathewson said, "Oh no, I think you won't." And I replied, "Oh yes, I think we will." Now I think we should not be chargeable with delay. The tabulation could have been prepared.

Mr. MATHEWSON: I don't think there was any request for it; at any rate, I do not recall it.

Mr. GANS: That exhibit shows the cost, station by station,
1665 of the various ingredients entering into the manufacture of gas and also shows the labor entering into it.

Mr. MATHEWSON: It does not cover the cost of distribution, does it?

Mr. GANS: It covers one element of the three, practically, that enter into the final cost, appears to be proved by Exhibit 93 and 94.

The MASTER: What you want is to cover those actual two months?

Mr. GANS: Yes, I want it to fit into the exhibit they have introduced, Exhibit 94 or 95.

The MASTER: I should think the simplest way to do would be to let Mr. Gans's expert go up there and make it up.

Mr. MATHEWSON: I do not think they could possibly without Mr. Carter's presence. And I think our men are sufficiently familiar with the books, so if it comes to that we could do it quicker than they could. Do you want to cross-examine him on that when you get it?

Mr. GANS: It would depend somewhat on the statement. I might want to ask him some questions.

Mr. MATHEWSON: We might complete his examination and let him devote his time to having the statement made up afterwards.

Mr. GANS: I would not want to close my cross-examination definitely, but I should assume there would not be many questions to ask after that statement was made up.

By Mr. MATHEWSON:

Q. How long would it take you to have that statement made up, after you got off the stand, devoting your time to it?

A. I think it might be done in a few days. My under-
1666 standing is that there is no two months of any kind in this proposition, simply that we reproduce this statement covering the calendar year's operations.

By Mr. GANS:

Q. That is right.

A. I think the simplest thing for us to do would be to prepare this.

By Mr. MATHEWSON:

Q. It would be quicker than any other way if it has to be done?

A. Yes.

Mr. BURR: Don't you think it would save time if these statements which were presented before the Gas Commission were also carried down to the time embraced in your Exhibits 93 and 94?

Mr. MATHEWSON: There are about two hundred of them. It is utterly impossible for us to do it and close this case within a month or more.

Mr. BURR: If you want to leave it that way, of course——

Mr. GANS: What exhibits do you refer to?

Mr. BURR: A good many of the exhibits I had him identify a little while ago. I want to say in this connection, Mr. Master, that I have asked for certain information which has not been supplied, and I think I made myself clear upon the record that we reserved the right after the report was made by the State experts to question further regarding the information contained in that report if it was not satisfactory to us. I have not seen that report and don't know what it contains. I spoke to Senator Page to-day, and probably to-morrow I will see it and it may contain all the information I want. But I wanted to make myself clear on the record the other day and

I want to make myself clear on the record now. I have
1667 asked for policies of insurance, payrolls and account books, and I hope that the information that I want and expect to get from those sources may be shown in these statements and I have no desire to protract this hearing unduly, but I do insist upon getting the information which I think is germane to the defence of the City and necessary for us to have from their books, which is the only source for the very vital information we require. If you think well of it, I will submit to Mr. Carter a list of the things which I require and if he can point out that they are in the statements already, I will check it up.

Mr. MATHEWSON: You are to see the reports of these accountants, and their business was, as I understood it, to assure themselves and make it unnecessary for us to do this. It does not seem necessary to make this request until you see what you have and see if your accountants have not covered all this, which I think they have.

Mr. BURR: What I want is, that when this information comes in I may reserve the right to cross-examine upon it.

By Mr. GANS:

Q. It is perfectly feasible to tell from your books the amount of gas manufactured at each one of your stations month by month, isn't it?

A. Yes, sir.

Q. You have reports of that?

A. Yes, sir.

Q. There will be no trouble whatever to give us that for the two periods as to which you have introduced your operating Exhibits 93 and 94.

Mr. MATHEWSON: It already appears in the printed record as to the nominal year October 31st, 1905, before the Gas Com-
1668 mission. That expressly appears and can be referred to there without making up a new statement.

Mr. GANS: The amount of gas manufactured at each of the works?

Mr. MATHEWSON: Yes, I think I am safe in saying so.

Mr. GANS: That makes it all the easier.

The WITNESS: So far as the calendar year is concerned, your experts took these figures off from our record.

Mr. GANS: Then it will be all the easier to make up that statement.

Mr. MATHEWSON: But if they have the information, I don't suppose you want us to make it up, do you?

Mr. GANS: I don't think it makes any particular difference which way it is done. It is simply a matter of reading off from reports, isn't it?

The WITNESS: I can make up a statement of that kind, if you wish. Do I understand you want a statement of the gas manufactured at each station each month in the year?

Mr. GANS: Yes.

The WITNESS: And the total, manufactured in the year?
Mr. GANS: Yes.
Mr. MATHEWSON: Do you want it month by month?
Mr. GANS: I want it month by month.

Q. Have you in your possession the bills for the taxes upon real property which I included in Exhibits 93 and 94?
A. Yes.
1669 Q. Those bills are itemized, aren't they?
A. Yes.
Q. Could you produce those for us to-morrow?
A. I will.
Q. I understand it has been your habit, Mr. Carter, to get from your engineering department, reports from each one of your works, showing either the cost of the operation of that particular plant or some figures which are embraced in the cost of operation and that it has been your habit to keep those reports for the purpose of comparison?
A. I have no knowledge of anything of the sort.
Q. Do you remember testifying to something somewhat similar to that before the Gas Commission, or am I mistaken?

Mr. MATHEWSON: You are mistaken, Mr. Gans.

(Mr. Gans requests the stenographer to read the last two questions and answers, which is done.)

Q. Well, after having had my question read, do you still say you haven't any figures such as my question refers to?

Mr. MATHEWSON: No, he didn't say so. You asked him whether the engineering department didn't furnish figures for the purpose of comparison.
The WITNESS: The engineering department is not able to make up any figures of cost. They don't know what the materials they are using cost the company.

Q. Well, have you from any source any such tabulation as I have referred to? That is, either a tabulation showing the entire cost of gas at each one of the stations, or showing certain elements of the expense.
A. I have such statem[illegible].
1670 Q. And you keep thos[illegible]
A. I do.
Q. Have you those as a part of the record of your department?
A. Memorandum for my personal requirements.
Q. You keep them in the files of your department.
A. Yes, they are in my desk.
Q. Have you anywhere any record showing definitely and specifically and accurately the cost of manufacture of gas at each one of your works?
A. Yes.
Q. Except as aggregated in the general ledger?
A. We have some by stations. I have receipts that show the cost at each station each month.

Q. Wherein do these reports that you speak of differ from those I have just asked you about which you said you had not made up?

A. You asked me for something that was prepared by the engineering department—received by the engineering department and given me monthly by the engineering department. These figures do not come from the engineering department; they are made up for me by the accounting department.

Q. Then the point wherein I was mistaken was as to their coming from the engineering department?

A. Yes.

Q. So you have made up and kept as part of your record from your own department, a statement of the cost of manufacture for each one of the plants, for each month, showing the items and elements of that cost?

A. I have such statements.

Q. Now would you be good enough to bring those statements for the nominal year and the actual year, the one ending October 31, 1905, and the other being the actual year of 1905.

Mr. MATHEWSON: Wasn't that covered by your accountant?

Mr. GANS: I assume not. I assume it would be utterly
1671 impossible in the time they devoted to those books to have done more than to rather superficially check up the general accuracy of the books?

Q. It was developed in the course of the examination of Mr. Franklyn, I think, that $1,800 rent which was paid by the National Coal and Coke Company, was paid to the Consolidated Gas Company. Mr. Mathewson informed us of that fact in the course of the examination. Are there any other payments that were made by the National Coal and Coke Company to the Consolidated Gas Company except such payments as are made for the purchase of coke?

A. I think quite likely.

Q. Where would those appear?

A. They would appear as a charge against the National Coke and Coal Company upon our books.

Q. And they would enter into your miscellaneous revenue, wouldn't they?

A. I do not mean by that technically the miscellaneous account, but they would not enter into the operating expenses of the company, would they? Or as a reduction of the operating cost?

A. That would depend on the nature of the charge, what it was for.

Q. This is a payment by the National Coke and Coal Company to the Consolidated Gas Company?

A. They would not pay us anything we did not charge them for, I presume.

Q. No, I presume that also. Then the place to find these various items would be the ledger account of the National Coke and Coal Company in your ledgers?

A. That would be the place to find any charge against the Na-

tional Coke and Coal Company for anything furnished them, either coke or supplies of any kind that they buy from us as a matter of convenience.

Q. And of course all the amounts paid by the National
1672 Coke and Coal Company enter into their operating expenses?

A. Not necessarily. It would depend upon what they bought. It might be something for construction purposes, in which case it would not enter into operating expenses.

Q. Do they do any constructing, the National Coke and Coal Company?

A. I think they might.

Q. Well, do they? You know about their operations?

A. I am not aware of their doing anything of that sort at the present time.

Q. So that suggestion would not cover the case, would it?

Mr. MATHEWSON: Yes, it would, if there were any, of course. He said that it would not be charged to the operating expenses if it went into construction. If they bought new horses and carts, that is construction in a bookkeeping term. It seems to me you are extremely technical and almost offensive in your examination.

Mr. GANS: It seems to me the witness is able to take care of himself.

The MASTER: Proceed, gentlemen.

A. It would go into their operating expenses if it was an expense of that nature, and not otherwise.

Q. In which of the two ledgers is that account kept?

A. In the sundry debtor ledger.

Q. Has that ledger been examined, Mr. Cuthbert, while you have been there; that is, do you know whether that ledger has been examined by Mr. Cuthbert?

A. Yes, it has been.

Q. Do you know whether that particular account has been examined by Mr. Cuthbert?

A. I don't know.

Q. In the event that he is not able to make a report on the account you have no objection to producing that ledger containing that account?

A. None.

1673 Q. Now, I don't know whether you have been asked, Mr. Carter, whether your company is now testing the tax imposed for the year 1905 by both the State tax and the franchise tax?

A. Not the State tax. The State tax for 1905 has been paid. The franchise tax is being contested.

Q. Any other tax being contested for that period?

A. For 1905?

Q. Yes.

A. I think not.

Q. Have you any knowledge as to the original capacity of your works, that is in 1884?

A. No.

By Mr. PAGE:

Q. Pursuant to my request, have you produced a summary of operations of the National Coke & Coal Company for the year 1905?
A. Yes, sir (producing paper).

Mr. PAGE: I offer that in evidence.
Received in evidence and marked State's Exhibit O.

Q. And you have also produced, have you, a statement of the coke produced, sold in manufacture and produced for sale by the Consolidated Gas Company for the year 1905?
A. Yes, sir.

Mr. PAGE: I offer that in evidence.
Received in evidence and marked State's Exhibit P.

Q. You have also produced pursuant to my request balance sheet of December 31st, 1903?
A. Yes, sir.

Mr. PAGE: I offer that in evidence.
Received in evidence and marked State's Exhibit Q.

1674 Q. You have also produced the balance sheet of December 31st, 1904, of the Consolidated Gas Company?
A. Yes, sir.

Mr. PAGE: I offer that in evidence.
Received in evidence and marked State's Exhibit R.

Q. You have also produced the balance sheet of December 31st, 1905?
A. Yes, sir.

Mr. PAGE: I offer that in evidence.
Received in evidence and marked State's Exhibit S.

Q. Referring to State's Exhibit O, I notice four items entered here in red ink, will you kindly read those items and state why they are in red ink?
A. There are but three items, one being a repetition of the other. The first item is $22, and is the difference in the price per load of certain coke, which operated to reduce the cost of the coke they purchased by that amount. The next item is included in the operating expenses as a credit item, cartage, $13,234.42, representing a credit balance in that account for the year. The next item is interest, $17.48, representing the credit balance in their interest account for the year, and shows in operating expenses as a credit item and operates to reduce the total expenses for the year.

By Mr. MATHEWSON:

Q. The fact is that those items in red ink on this Exhibit O mean deductions and not additions?
A. That is a brief description of it, Mr. Mathewson.

By Mr. PAGE:

Q. State's Exhibit O shows the operations of the National
1675 Coke & Coal Company for the year 1905 alone. That is, I mean by that there is nothing carried forward from any previous year on that statement?

A. That appears to be the case.

Q. And the net earnings for that year are $10,596.33?

A. Yes, sir.

Q. Of which dividends are paid to the Consolidated Gas Company as being the owner of the entire stock, of $5,000?

A. Yes, sir.

Q. Leaving a surplus that was earned by the company on its coke operations alone for that year of $5,596.33?

A. Yes, sir.

Q. I notice in Complainant's Exhibit 94, that you have under the head of Residuals, coke, 167,071.70 loads at $2.02 per load, while State's Exhibit O accounts for 145,435 loads. Is that correct?

A. That is correct.

Q. To whom was the balance of the 22,000 loads approximately of the coke sold?

A. I don't think it was sold at all, Senator, or more than a very small portion of it. The bulk of its was used in water gas stations and used in other departments than the manufacturing department.

Q. I think you testified before that the coke used in tons, 19,892.54 was the coke that was delivered and used at the water gas station, and that that was additional, was it not, to this coke of 167,071.70 loads?

A. No, I have not so testified, no, sir.

Q. Your testimony is that 18,892.54 was taken out from the 167,071.70 loads?

A. It is a part of that Senator. It is included in that as coke accounted for in the residuals.

Q. Referring to the item of street lamp account on Exhibit 94, you carry there as a debit balance $289,259.09. Will you state of what that debit balance is composed?

A. It is composed of the amounts expended by the company for the maintenance of public lamps and for erecting and re-
1676 pairing public lamps, less the amount charged to the city for erecting and repairing public lamps.

Q. That is, if I understand your explanation, it would be the amount that it cost you to maintain, erect and repair the public lamps in excess of what you receive from the city for the same?

A. For erecting and repairing only.

Q. Referring to State's Exhibit G, repairing street lamps, $10,986.50; is that not the item that you charged the city for the year 1905 for repairing street lamps?

A. That is the amount we charged the city for that work. It is not the cost of it, however.

Q. On August 31st you transferred from your journal from public street lamp account to the gas sales account the sum of $151,690.41. Why was that done?

A. I have already explained, Senator, that we abandoned our practice of estimating the cost of lamp maintenance and treating it as a credit to the street lamp account, and included in the gas sales account the entire amount that we had charged the city for supplying gas to, lighting and maintaining the public lamps, there being no division of the amount charged the city between the amount charged them for the gas and the amount charged them for the maintenance.

Q. You sold to the city, per meter service, 127,746,300 cubic feet of gas at 90 cents, according to State's Exhibit G, didn't you?

A. Yes.

Q. And you also estimated the amount as applicable to street lamps, 270,779,670 cubic feet, didn't you?

Mr. MATHEWSON: Is that by the same exhibit?

Mr. PAGE: Yes. State Exhibit G.

A. Yes, sir.

Q. And you have carried out as having received on that
1677 account the sum of $565,241.39?

A. Not as received.

Q. Well, as charged?

A. Yes.

Q. For which you expect to receive pay, of course?

A. Hope to.

Q. Now, if we take that gas at 90 cents and deduct the results from $565,241.39, will we not have a credit that is applicable to the maintenance and repairs of street lamps?

A. If we assume that the quantity estimated was correctly estimated, which we know is not the case.

Q. On Exhibit No. 94 you state the entire amount of your gas sold to be 13,283,163,767 cubic feet, is that correct?

A. Yes, as recorded in our accounts, but as I have already testified, we do not meter the gas that is supplied the city. It is an estimate, estimated at the quantity stipulated in the contract, although we know we are supplying more gas than that.

Q. In arriving at that amount of gas sold did you not include as sold the 217,779,677 cubic feet, that has been shown on Exhibit G, as being the amount estimated to have been supplied the city for public lamps?

A. We did.

Q. And all your computations as to the cost of gas per thousand sold have been based upon that figure?

A. They have.

Q. So that for all purposes of your bookkeeping, and estimating your cost prices, that amount has been included as the actual amount of gas sold?

A. Yes.

Q. Now, if we multiply that 270,779,677 by 90, we will get the amount that is chargeable to the city on account of the gas that was sold to them for street lamps?

A. Assuming that estimate is correct.

Q. You have used it, and assumed it to be correct in all your books of account?

A. Our employment of that quantity we assume did not
1678 change the quantity that we estimate we are supplying the lamps.

Q. That would be what?

A. $243,702.71.

Q. And assuming that as a factor you find that your unaccounted for gas in 1905 was only what per cent.?

Mr. MATHEWSON: 2.24, I think.

A. That is the case.

Q. If we take that $243,702.71 from the $565,241.39, as shown on Exhibit G as having been received for public lamps, including lighting and maintaining, we have the result of $321,539.68. If that amount was credited to the street lamp account, instead of having a debit balance, you would have a credit balance? You wipe out the $289,259.09 entirely and produce a credit?

A. I do not know upon what theory you would so deal with the item. That we made any profit at all is purely problematical. As a matter of fact we believe that the gas we supply the city at the rate of ninety cents per thousand would leave something to add to what appears in the street lamp account, $289,259.09, representing a loss on maintenance of lamps instead of a profit on them.

Q. I know; that is the theory under which you proceed, but you have a percentage of unaccounted for gas of only 2.24 per cent. Do you know of any other gas company in the United States that operates under so low a percentage of unaccounted for gas?

A. I have heard of companies where they operated a little closer than that.

Q. Don't you know that it is usually from 10 to 15 per cent.?

A. I think in our own case 20 years ago it was nearer 15 per cent. than anything else.

1679 & 1680 By Mr. GANS:

Q. You receive from the companies operating under the agency agreement statements of the amount due under that agreement, in some itemized form, do you not, month by month?

A. Yes, we do, your accountants saw several bills with all the data accompanying them.

Mr. MATHEWSON: They wanted to see them in order to check them with their notes, and they did.

The WITNESS: In fact, they copied them entirely.

Mr. MATHEWSON: Mr. Carter let them copy one or two and take them away so as to show you.

Mr. GANS: There would be no difficulty in producing them?

The WITNESS: None whatever.

Mr. MATHEWSON: No, but I do not think you would want them.

Mr. GANS: They would not be very bulky? I do not know what they are like.

The WITNESS: No, they are not bulky.

At 5 P. M. adjourned to to-morrow, September 5, 1906, at 11:30 o'clock A. M.

Last Exhibits:

Complainant's 223.
State's S.
City's 34.

1681 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

Met pursuant to adjournment.

NEW YORK, WEDNESDAY, *September 5th*, 1906.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Burr, Mr. Gans.

1682 ROBERT A. CARTER, recalled and further examined, testified as follows:

Mr. BURR: I want to offer in evidence certain statements from the Gas Commission records.

I offer in evidence pages 961 to 963, being the statement of Mr. Bradley's cost sheets, giving his monthly record of the cost of certain items entering into gas manufacture at each station for each month from October, 1904, to September 30, 1905.

Mr. MATHEWSON: It was from Mr. Carter; it was part of the statement produced before the Commission to which I referred yesterday, and which was explained to the Commission as incomplete and fragmentary, and which the Commission said they had simply wasted time on in its present form.

Mr. BURR: You may give the same explanation with regard to that statement which you gave before the Gas Commission, if you think proper.

Mr. MATHEWSON: I am simply calling your attention to it, thinking that when you know what it is that you will not think it is proper to put it in. I do not object to your putting this in if you think it is in any way material under the circumstances.

Received in evidence and marked City Exhibit 35.

Mr. BURR: I offer in evidence Exhibit 105, appearing on page 2034-A of the proceedings before the Gas Commission, purporting to be a statement of gas made for the Consolidated Gas Company by other companies net for the nominal year ending October 31st, 1905, and which Mr. Carter has testified, I believe, was made under his supervision, or by him.

1683 By Mr. BURR:

Q. Is not that so, Mr. Carter?
A. Yes, sir.

Received in evidence and marked City Exhibit 36.

Mr. BURR: I offer in evidence Exhibit 110 before the Gas Commission, appearing on page 2035 of the proceedings, being the statement of labor cost of the 14th Street station from October 31st, 1904, to October 31st, 1905.

Received in evidence and marked City Exhibit 37.

Mr. BURR: I offer in evidence Exhibit 134 before the Gas Commission, appearing on page 2069, of the proceedings before that Commission, being the 42d Street works labor cost for the twelve months, ending October 31st, 1905.

Received in evidence and marked City Exhibit 38.

Mr. BURR: I offer in evidence Exhibit 138 before the Gas Commission, appearing on page 2072 of the proceedings, being the statement of the 44th Street Station labor account, November 1st, 1904, to November 1st, 1905.

Received in evidence and marked City Exhibit 39.

Mr. BURR: I offer in evidence Exhibit 142, offered before the Gas Commission and appearing on page 2075 of the proceeding, being the statement of the labor cost at the 99th Street Station, October 31, 1904, to October 31, 1905.

Received in evidence and marked City Exhibit 40.

Mr. BURR: I offer in evidence Exhibit 143 before the Gas Commission, appearing on pages 2076 to 2082 of the proceedings before that Commission, being an analysis of the changes in cost at the
1684 various stations between September, 1904, and September, 1905.

Received in evidence and marked City's Exhibit 41.

Mr. BURR: I offer in evidence Exhibit 147, offered before the Gas Commission and appearing at page 2137 of the proceedings, purporting to show cost of meters.

Received in evidence and marked City's Exhibit 42.

Mr. BURR: I also offer in evidence Exhibit 148, offered before the Gas Commission, appearing at pages 2138-9 of the proceedings, purporting to be an analysis of costs of meters and pipes.

Received in evidence and marked City's Exhibit 43.

Mr. BURR: I also offer in evidence Exhibit 149, offered before the Gas Commission, appearing on pages 2139 to 2156 of the proceedings, being a statement of plants and operations for the nominal year ending October 31st, 1905.

Received in evidence and marked City's Exhibit 44.

Mr. BURR: And I submit for the record a statement which I have

handed to the witness of information desired, and which I ask him to produce as follows:

1—Page 900: Manufacturing capacity of each station in 1884 in coal gas, and likewise in water gas.

2—Page 900-901: Contracts and vouchers for all the holders constructed since 1884, and giving, separately from the holders, the foundations, valve houses, etc., for each holder.

3—Page 901: Number of services in use Dec. 31 of each year since 1899.

1685 4—Page 901: Number of new services laid from Jan. 1, 1900, to Dec. 31, 1905, by sizes.

5—Page 901: Cost of all these services laid from Jan. 1, 1900, to Dec. 31, 1905, including cost of laying and valves, boxes, etc., connected therewith.

6—Page 901: Interest paid yearly on the bonds and debentures or other indebtedness of the Consolidated Company since 1884.

7—Page 901: The principal of said bonds, debentures or other indebtedness each year since 1884.

8—Page 901: Average annual quotations on said bonds or debentures since 1884.

9—Page 902: Average quotations of the debentures of 1904 during 1904 and 1905.

10—Page 905: Amount of gas received, price paid for same, from each company under the Agency Agreement during each month from January 1, 1904, to August 1, 1906.

11—State the date of the largest sales during 1905 by each of the companies with which the Consolidated has agreements, and the amount of the sales on said date, including in said sales not only those to the Consolidated Company, but to all others.

12—Total manufacturing capacity in coal gas, and likewise in water gas, of each of the companies with which the Consolidated has agency agreements.

13—Complete to August 1, 1906, the monthly table of the cost of gas at each station which was given from Oct. 1, 1903, to Oct. 1, 1905, on pages 961-963 of the printed record of the case before the State Gas Commission. If this is impossible, complete up to May 1, 1906.

14—Read into the case in this connection said pages 961 to 963, and any necessary explanatory matter immediately before or
1686 afterwards in connection with the testimony or cross-examination of Mr. Bradley.

15—Bring in all the bids, whether successful or not, in connection with the holders constructed since 1884, or, if that is impossible, then for as many years as the records have been kept.

16—Do the same for pipe, and for all other items of construction involving in each case more than $5,000.

17—Payroll for December, 1905.

18—Produce existing policies of insurance.

19—Produce the vouchers for the holders built since 1895.

20—Produce the vouchers for all apparatus or buildings costing more than $5,000 since 1895.

21—Produce the vouchers for oil during 1905 and 1906 up to Sept. 1st.

22—Give the age of all apparatus and buildings costing more than $1,000 and testified by Mr. Mayer in cases where he did not give the age.

Mr. BURR: Also please furnish the amount of gas consumed by the Consolidated Gas Company for its own use in the years 1904 and 1905, and a statement of coal used by each station and by each subsidiary company, which you agreed to furnish at the time the book itself containing that information was produced here and from which you were examined.

Mr. MATHEWSON: No, sir. There was no request made that he should furnish the amount of coal used by each subsidiary company. He was requested to state the amount of the various contracts which were used by the companies in which the Consolidated
1687 owned stock. I think you will find no record of any request that he state how much coal was delivered to each subsidiary station of the Consolidated Gas Company.

Mr. BURR: Well, I remember that is the line of information we were pursuing at the time we had the book here, and if I did not ask it that is what we intended to request. If he can produce one he can produce the other, I assume.

Q. And with regard to the trial balance, Mr. Carter, which was produced here yesterday, I believe you were to add to that at the request of Mr. Gans, the months of November and December, isn't that so?

A. The trial balance produced here yesterday? No, sir, I have no recollection of any request of that nature.

Q. Have you produced any trial balance for the year 1905 in this case?

A. There was prepared for you trial balance sheets covering 13 months from October 31, 1904, to December 31st, 1905, inclusive.

Q. That covers up to December 31st, 1905?

A. Yes.

Mr. PAGE: I put in evidence yesterday, Mr. Burr, trial balance sheets for 1903, 1904 and 1905.

Mr. BURR: Up to the 31st of December, 1905?

Mr. PAGE: Yes.

Q. With regard to your last trial balance sheet up to December 31, 1905, I want to ask whether all the accounts at the close of the year were embraced in that trial balance?

A. If it is a trial balance, no. If it is a balance sheet of that date, yes.

Q. Was that trial balance made before the books were closed or after the books were closed for that year?

A. I would like to see the exhibit before answering that
1688 question and find out whether it is a trial balance or a balance sheet you are referring to. (After conferring with Mr. Page.) The closing entries had all been made before that balance was taken off from the ledger.

Q. For the year 1905?
A. For the year 1905.
Mr. PAGE: It was a balance sheet; not a trial balance.
Q. I have yet to learn from any statement you have made or from any exhibit you have offered in evidence here what the Consolidated Gas Company claims is the cost of making and distributing to the burner 1,000 cubic feet of gas. Do you know what it is?

Mr. MATHEWSON: What is that?
Mr. BURR: I ask him, as Secretary of the Consolidated Gas Company, to state here now what he claims is the cost of manufacturing and distributing to the burner of the consumer a thousand cubic feet of gas?
Mr. MATHEWSON: I will say in reply to that, that the exhibits which we have put in show the expenditures and a computation on that basis is as available to Mr. Barr as it is to us. As to the actual amount which should be charged to the cost of 1,000 feet of gas, we shall put on other witnesses who will testify on that specific point. Mr. Carter has not prepared himself to do so, but simply to present the figures which he has presented.

Q. Then I will ask, do you charge against the cost of the manufacture and distribution of gas at the burner to the consumer, all the items which appear on your Exhibits 83 and 94?

Mr. MATHEWSON: That is a statement, if the Master please,
1689 which shows the expenditures of the company. I don't know that any specific schedule showing the charges against the cost of gas is made up except the figures that are presented and will be presented here.
Mr. BURR: Now, you see, Mr. Master, we have been wandering around in a sort of a quagmire, and a want to get on *terra firma*. I want the company, here, through its representative, to say, as it ought to be ready to say, what is their claim regarding the cost of the manufacture and production and distribution to the consumer of a thousand cubic feet of gas as the conditions exist now, or as they existed when this proceeding started. I think that is a fair question. And if he says that it appears in any statement here, in any exhibit which has thus far been presented, I want him to point it out. I think that also is a fair question.
Mr. MATHEWSON: Do not be impatient and you will get it, but you cannot expect one witness to prove the entire case. You will have it, if you will only wait a little until we can put the witnesses on who can testify on that subject. Mr. Carter merely testified to facts——
Mr. PAGE: You are going to.
Mr. MATHEWSON: Certainly we are going to. Mr. Carter only testified to facts from the books, and it is a question to my mind as to whether one item or another as to which you raise the question is charged against an account which is called "cost of gas." You do not find any entries in the ledger such as "Charges against the cost of gas."
Mr. BURR: No, I think you leave it very hazy.

Mr. MATHEWSON: We shall not if you give us time to put our case, but do not ask this witness to testify on the whole propo-
1690 sition, which he cannot do because he is not an engineer.

Mr. BURR: I ask this officer of the Consolidated Company if all the items which appear upon Exhibit 93 and all the items which appear upon Exhibit 94 submitted here by the complainant are charged as a matter of fact against the cost of the manufacture and distribution to the consumer at the burner of 1,000 feet of gas?

The MASTER: Charged on what? Who charged, and where charged?

Mr. BURR: Charged by the Consolidated Gas Company as the expense or the cost at the burner of a thousand cubic feet of gas.

The MASTER: Is not that a matter of construction and argument? Does it not appear in the bill of complaint what they charge as the cost of a thousand cubic feet of gas? And have they not got to sustain that by proof of facts? I do not understand that a ledger account has any "cost" heading, has it, specifically?

Mr. BURR: Yes. You remember, Mr. Master, on Exhibit 93, 72.12 cents appears as the cost made out by this summary of operations for the nominal year ending October 31st, 1905; cost per thousand cubic feet of gas sold. That is the heading; 72.12 cents is the entry.

The MASTER: Does not that show for itself that the items are distinct in there?

Mr. BURR: If you let me finish, if you please.

The MASTER: Certainly.

Mr. BURR: Exhibit 94, under the same heading, cost per thousand cubic feet sold, indicates 74.81 cents. Now I ask, does he charge up against the cost of the manufacture and distribution to the consumer at the burner, of one thousand cubic feet of gas all the
1691 items which appear upon this summary of operations for the nominal year ending October 31st, 1905, Complainant's Exhibit 93, and all the items appearing upon the summary of operations for the calendar year 1905, being Complainant's Exhibit 94.

The MASTER: When you say "does he charge that," what you mean is in arriving at that percentage on those exhibits?

Mr. BURR: Yes.

The MASTER: Well, you may ask him to explain how he arrives at that percentage stated on those exhibits to be the cost. That is a proper question. He may explain it, if he can.

Mr. MATHEWSON: I want to say, Mr. Master, this witness is not an engineer, nor is he an expert.

The MASTER: If he does not know he can say so.

Mr. MATHEWSON: There are others whom I shall question on that subject.

The MASTER: You may answer it, Mr. Carter.

A. The rates per thousand cubic feet that are shown in Exhibits 93 and 94 are calculated by taking the various amounts and dividing them by the total quantity of gas sold during the year.

Q. Then all these items do enter into producing the result of 72.12 cents on Exhibit 93 and 74.81 cents on Exhibit 94?

A. That is the result of that calculation; yes, sir.

Q. Are any of these items appearing on either of these statements to be eliminated, in your opinion, in getting up the cost of gas per thousand cubic feet?

Mr. MATHEWSON: I make the same objection, that the witness is not an engineer or expert.

1692 The MASTER: I do not see that that is a competent question to ask the witness. It is a matter of argument.

Mr. BURR: You will remember there are some items here, "general expenses, interest, taxes," and one thing or another. It clearly appears upon the record that so far as those things are affected or affect the stocks, they have to be considered as affecting the price of a thousand cubic feet of gas. It is conceded that on both these exhibits such entries do appear, and I want to know whether he is now prepared, as the financial officer of the company, to say that all these items are to be taken into consideration in figuring up the actual cost of a thousand cubic feet of gas, or whether some of them are to be eliminated, and, if so, which are to be eliminated from the consideration of the problem.

The WITNESS: I think I might perhaps explain in a word or two the method by which we arrived at the profits from our business during the year, and as the result of a year's operations. We credit our profit and loss account with income from the sale of gas, from miscellaneous sources, and from the securities of other companies. Against that we charge in the profit and loss account all of the expenses, as shown in Exhibit 94, for the calendar year. The balance represents the profit for the year. We make no application of any particular items of expense against any particular items of income, dealing with both in the gross.

Mr. BURR: That is all for the present.

Mr. GANS: There are a few questions I can ask the witness,

1693 but until he furnishes the information I requested I cannot proceed very far.

The MASTER: I understand your cross-examination is delayed now on account of the absence from town of your expert.

Mr. GANS: It is delayed by both things. I could have gone on in the absence of the expert if these matters which have been asked for had been produced to-day.

Mr. MATHEWSON: What did you ask for which could possibly be produced to-day?

Mr. GANS: I asked for the statement of the operating expenses of each one of these works, which are part of the files of the Company, and which could have been produced without any difficulty, I should assume. Mr. Carter says they could not. I was wrong in my assumption. There are one or two questions I would like to ask Mr. Carter, though.

By Mr. GANS:

Q. Included in your miscellaneous income, as appearing on the books of your company, are discounts on materials purchased to the amount of $9,497.57. Is there not such an item?

A. Yes.

Q. Those materials are materials the cost of which enters into the amounts charged on Exhibit 94, and go to make up the total of that amount of $9,936,910.42, do they not?

A. No, sir, not necessarily. They may in part. That represents discounts on the purchase of a great many things that might not go into the operating expenses at all. They might go into our property account.

Q. Then can you tell us to what extent the discounts are discounts on materials which did enter into this total on Exhibit 94?

A. Probably, as the result of a great deal of labor, we might
1694 go through the year's record of discounts and separate them in that way.

Q. Another item of your miscellaneous income is real estate rents aggregating $37,408.88, is that right?

Mr. GANS: I got these figures from the accountants, and of course I don't know whether they are right.

Mr. MATHEWSON: Look at your own data, if you have it, to verify that.

A. That is correct.

Q. I understand there appears on your books also an amount as a rebate on oil purchased to the amount of $50,000; is that right, or, rather, the amount of $112,000?

A. Occurring during the period covered by these statements?

Q. Well, as a rebate on the books covering this period.

A. There is nothing appearing on the books covering either the calendar year of 1905, or the nominal year ending October 31st, 1905, of that nature.

Q. Do you mean that there isn't any entry on the books which were in use at that period of a rebate received during that time.

A. During the year 1904 there would appear upon the books a record of an adjustment, improperly termed a "rebate," representing the adjustment of a variation between the prices of oil under two contracts. The matter was fully explained to Mr. Cuthbert at the time he was at the office.

Q. Was that money received during 1905?

A. No, it was not received during 1905; nor during the nominal year ending October 31st, 1905.

By Mr. MATHEWSON:

1695 Q. Might you not in that connection explain a little more fully what that adjustment was so that we can understand it?

A. We had occasion early in the Summer of 1904 to change the grade of oil that we were using. The new oil was at a lower price. The understanding was that we were to pay the price under the old contract until it was exhausted, until the quantity stipulated was exhausted, in a month or two, at the end of which time we would receive a credit representing the difference between the price of the two oils.

Q. Which were of different grade.

A. Which were at different rate.

Q. And this adjustment is simply the difference and not a rebate on the price at all.

A. Simply an adjustment between two prices and in no sense a rebate.

By Mr. PAGE:

Q. I suppose you refer to the new contract which was made in June, 1904?

A. In June, 1904.

Q. That provided for oil of a grade of 28 Baumé, to be furnished at a price of 4.04 cents a gallon, the new contract.

A. That is the case.

Q. What price was provided to be paid by the other contract, so obviated by that contract?

A. I should have to trust to my memory. I think it was 4⅜ cents a gallon.

Q. 4⅜?

A. Yes, sir. That would be 4.375 cents.

Q. Now taking that to be the figure, will you state how much oil was furnished on the old contract and rebated at $112,000?

A. The figure you name, to the best of my recollection, covered the adjustment for all the companies who were receiving oil under that contract.

Q. Certainly.

A. As we were the contracting parties it went through our accounts, and from memory it would be impossible for me to
1696 say the number of gallons that were delivered that were subject to that adjustment in price.

Q. It would be a matter of very short computation, wouldn't it, to take the difference in price and make the calculation as to how many gallons it would take to make $112,000?

A. It seems a pity to spread on the record my recollection of the price and quantity. I can get that information exactly if it is desired.

Q. Well, it would be quite a large quantity of oil, wouldn't it?

A. Yes?

Q. Then, that contract that was made in 1904 was for 177,000,000 gallons of oil and was to run to June, 1906, and on October 31st, 1905, you made a new contract at a higher price, didn't you?

A. Yes, we were obliged to do so because the higher candle power established by the law which went into effect July 1st, 1905, could not be maintained with the grade of oil we were getting under the contract of June 1st, 1904.

Q. Why not?

A. Well, you will have to get the engineers to answer that question. It would be too technical for me.

Mr. MATHEWSON: Mr. Bradley expressly recommended it and said that he would not undertake the responsibility of running through the winter and supplying 22-candle power, using the same kind of oil that we had been using before, and the other contract expired, I think, in April, 1906, or such a matter, so that it practically made no difference. We made the best trade we could.

Q. The contract that was made for 1905 and superseded the June, 1904, contract provided for a much higher price for the same grade of oil, didn't it?

A. Yes, but it insured our getting the oil at that figure for
1697 the next three years, whereas we had but a comparatively short term during which the then contract would continue in force.

Q. There was, however, a very large amount of oil that was still to be delivered under the terms of the June, 1904, contract, was there not, at a lower price?

A. Yes.

Mr. MATHEWSON: But not of the higher grade of oil that was needed in the winter. That was the point. That was pretty nearly exhausted. The fact that we could get a low grade of oil did us no good at that time.

Q. You produced here your oil account, and that shows from October 31st, 1904, to October 31st, 1905, that you had used 82 million gallons of oil. Do you recall that fact?

A. To the Consolidated alone?

Q. No; what was delivered under that contract, as shown by the account which you produced here, by your books, and which we entered quite fully upon the record.

A. I do not recall the figures.

Q. You recall, do you not, that the account which you brought down here commenced with the 1st of November, 1904?

A. I do not know what account you are referring to; I do not recall any account commencing November 1st, 1904.

Q. I am referring to the book which you produced here that showed the deliveries of oil, which was City's Exhibit 34 for identification, and if you will turn to page 1015 of the record you will see that your testimony commences:

"It means the quantity delivered between the 1st of November and the 29th of November, which was the last day of November, aggregated 6,190,868 gallons."

A. I think that was 1905, not 1904.

1698 Mr. MATHEWSON: The examination did begin with 1905. Then it took up December, 1905, according to my recollection.

Q. Here is the question, at page 1025:

"I will ask you what the total, 82,061,124, on page 242 of this book in column 'Gallons as per invoice' refers to? A. It refers to the total quantity of oil delivered between September 28, 1904, to October 31, 1905."

A. Under the particular contract which was recorded on that page of the contract record.

Q. That was under the contract of June, 1904, which called for the delivery of 177,000,000 gallons of oil, didn't it?

A. To the best of my recollection, it was.

Q. Now, on November 1st, 1905, you made the new contract to which you referred, didn't you, calling for the delivery of oil at a higher rate, didn't you?

A. Yes.

Q. And that contract called for the delivery of 255,000,000 gallons of oil at 28 degrees and 34 degrees Beaumé?

A. That is right.

Q. Portions of the deliveries were changed, however, from the contract of June, 1904, providing for 25 per cent. of 34 degrees and 75 per cent. of 28 degrees Beaumé, while your contract of November 1st, 1905, called for 40 per cent. of 34 degrees and 60 per cent. of 28 degrees?

A. That is correct.

Q. If, from September 28, 1904, to October 31, 1905, there had been delivered to you under the contract for 177,000,000 gallons, 82,000,000 gallons of oil, can you, with those figures before you, state what was delivered between the first of June and the 28th of September?

Mr. MATHEWSON: 1904?

Mr. PAGE: Yes.

1699 A. You are asking me a question, and I do not know that I can answer it unless you can refer me to something that will help me. I do not know that I can give you that information from that record.

Q. Will you refer to the books of the Company in order that we may have the information furnished to us accurately as to how much oil was delivered from the various companies, stated in the same manner that this is on the record, from page 1015 over to page 1026, between the first day of June and September 28th, 1904?

Mr. MATHEWSON: Can that be done without much trouble, Mr. Carter?

The WITNESS: Not without trouble, but it can be done.

Q. The amount of trouble that would be involved in doing that would be going to your office and opening your ledger that had the account——

Mr. MATHEWSON: He is willing to do it.

Mr. PAGE: Wait a minute; we will see.

Q. (Continuing:) —opening your ledger to the account which would show the oil delivered, and copying the total items which are there footed for each month, for the months of June, July, August and September, would it not, four entries?

A. Assuming that the same marginal entries appear there.

Q. And if the same marginal entries do not appear, it would mean the mere adding up of each month from the items appearing thereon for four months, would it not?

A. That would be about the labor involved.

Mr. MATHEWSON: I do not think it is material, if the Master please. I shall not object, but I do not think it is material.

1700 This is in 1904, entirely outside of the period that we are investigating.

Mr. PAGE: I think the Master will see the application.

Mr. MATHEWSON: I do not think that there is any, but I have no objection to his doing it. We are getting pretty well loaded up with things called for already.

Mr. PAGE: Do I understand that you will do that?
Mr. MATHEWSON: Yes.

Q. You can go to the telephone and telephone to a clerk now and have it prepared and ready for us this afternoon, can you not?
A. My clerks are very busy just now, preparing stuff called for yesterday, and will be for several days.
Q. There was a very substantial amount of oil still remaining to be delivered under that contract.
A. What contract are you referring to?
Q. I was just going to tell you—of June, 1904.

Mr. MATHEWSON: Remained by November 1st, 1905?
Mr. PAGE: Yes.

A. I should say quite a quantity.
Q. Irrespective of how much oil may have been furnished that was credited to the old contract and rebated?
A. And adjusted as to price.
Q. If you want to put it in that form—adjusted as to price. Now, when is the adjustment as to price to be made upon the remaining amount of oil that was to be furnished under the contract in 1904 as to the contract of 1905?
—. There will be no adjustment of that kind made.
Q. Then I am to undersand that the company foregoes the benefit of the cheaper contract and the deliveries that are to be made under that entirely?
1701 A. Because they were obliged to cancel the contracts whether they wanted to or not.
Q. Will you answer that question yes or no. I think it is capable of such an answer.

Mr. MATHEWSON: The witness is entitled to answer it in any reasonable way.

A. They did forego for the reason I have stated, because they were obliged to cancel the contract.
Q. Why were they obliged to cancel the contract?
A. Because they were obliged to substitute another oil for that for which they were under contract.
Q. I call your attention to the fact that the two contracts call for exactly the same grade of oil, but in different quantities.

Mr. MATHEWSON: Proportions.

A. Under the contract we would not have been able to get the oil of higher grade which we required for the Winter of 1905 and 1906.
Q. That may be, but you mean by that that the 25 per cent. of the 177,000,000 of 34 degree Baumé had been exhausted; is that it?
A. It was not exhausted. There was not a balance sufficient to carry us through the Winter.
Q. And there was sufficient still remaining of the 28 degrees Beaume, wasn't there?
A. You could not cancel the contract in part.
Q. No, but if you had used up the quantity of oil which was to be

delivered at 34 degrees you could make a new contract for 34 degrees without foregoing the contract for 28 degrees, could you not?

A. I think not.

Q. In order that we may close up this particular instance, will you be prepared with that date after recess?

A. After recess? Well, I do not like to undertake to do
1702 things on short notice. I would not like to present that here without some opportunity to confirm it and examine it, and understand what they are giving me.

Q. All I want is those entries from the books.

A. I know what you want, Senator.

Q. Do you recall whether the accounts were kept separately as to the deliveries of 34 degrees Beaume and 28 degrees Beaume? They were, were they not?

A. I do not know.

Q. I call your attention to page 1014 of this record, where you make this statement:

"Referring to page 262 of City's Exhibit 34 for identification, calling for 102 million gallons of 34 degree oil and above. The record indicates the date of deliveries, the point of deliveries, the gallons as per invoice, the barge number in which delivery was made, and the amount of the bill and the gallons as per the company's measurement."

Does that refresh your recollection as to how that book was kept?

A. It very plainly indicates how the record was kept; I have no doubt it is correctly stated there.

Q. On page 1026 of the record:

"Q. At the top of this column, 'Contract,' appear the words and figures '135,000,000 gallons, 28 and below.' What does that mean? A. 28 degrees of specific gravity and below.

Q. Does that refer to a contract for 153,000,000 gallons of that kind of oil? A. It refers to a contract of 255,000,000 gallons of 28 degrees and 34 degrees."

Now, taking the 153 million gallons at page 1026 of 28 degree Beaume and the 102 million gallons referred to on page 1014
1703 for 34 degree Beaume, adding those together, we have 255 million gallons, do we not?

A. We do.

Q. Now, does that refresh your recollection as to whether the accounts were kept separately as to the different degrees of oil?

A. Your question did not refer to this contract that we are talking about now at all. It referred to the previous contract, and I stated I did not know whether the previous contract was similarly recorded or not.

Q. You do not know whether in this particular you have changed your method of bookkeeping or not?

A. No bookkeeping involved in it whatever; merely a record of deliveries.

Q. Made upon the books of the company. That is all any bookkeeping is, is it not, a record of transactions made upon the books of the company?

A. The dictionaries so describe bookkeeping, I think.
Q. It would be a very easy matter, when you open that book, to tell?
A. Very simple indeed.
Q. Well, if it is kept separately, will you bring it?
A. We are losing a lot of time about it.

The MASTER: It seems to me that there has been an enormous amount of time lost over it. Why cannot we send up and get the book and have it brought down here, and have it out, instead of prying out these questions? The book shows what it is, I suppose. Why don't you get it, Mr. Mathewson?
Mr. MATHEWSON: I am perfectly willing, but the book was not asked for. We were asked for a statement and I said it would be produced.
The WITNESS: It can be produced.
Mr. PAGE: Very well; let us have the books produced this afternoon. I suppose it is time to adjourn. I thought I was saving time and meeting the convenience of the complainant. If I have wasted the time of the Court, I am sorry.

Here a recess was taken until 2 o'clock P. M.

1704 After Recess.

ROBERT A. CARTER continued.

By Mr. PAGE:

Q. Mr. Carter, have you produced the book that contains the account of oil delivered under the contract of 1904?
A. Yes, sir.
Q. Will you turn to the beginning of that account. Do you find that that account is divided into oils delivered at 34 degree Beaumé, and 28 degree Beaumé?
A. The contract of July 1st, 1904, is divided.
Q. Now will you start with the beginning of that account at the 34 degree Beaumé.

The MASTER: Is this book marked for identification?
Mr. PAGE: Yes, it is Exhibit 34 for identification.
(Witness produces City's Exhibit 34, for identification.)

Q. That is not it; that begins with September.
A. Those are the first deliveries under that contract.
Q. The first deliveries made under the contract, City's Exhibit 10, which by its terms went into effect the 1st of July, 1904, were made when, Mr. Carter?
A. September 28th, 1904.
Q. And the testimony already given gives the entire amount of oil that was delivered under that contract up to the 31st of October, 1905, does it?
A. 31st of October, 1905.
Q. And the oil that was delivered from the 1st of July, 1904, to

the 28th of September, was delivered under the previous contract, is that right?

A. Yes, sir.

Q. Does that also hold good as to the 28 degree Beaumé as
1705 well as the 34 degree, under the contract, City's Exhibit 10?

A. The deliveries to which you have just been referring, appearing on page 229, commencing on September 28, 1904, were under the contract of July 1st, 1904, and were of the 28 degree oil.

Q. Well you can finish now about the 34 degree oil, whether that commenced at that time or not?

A. The deliveries that were made of 34 degree oil under the contract taking effect July 1st, 1904, began in March, 1905.

Q. And the amount of 34 degree Beaumé oil delivered under that contract was 7,257,982 gallons.

A. Yes, sir, that is right.

Q. And that contract called, did it not, for the delivery of 44,250,000 gallons? I think it is stated at the head of page 260, isn't it?

A. 44,250,000 gallons.

Q. On the 31st of October, when this new contract was made, the entire amount of oil that had been delivered on the contract Exhibit 10 was 82,061,615 gallons of 28 degree?

A. 82,061,124 gallons.

Q. Of 28 degree and 7,257,982 gallons of 34 degree Beaumé oil?

A. That appears to be the case.

Q. Leaving due the company on that contract on the 1st of November, 1905, 50,000,000 gallons and over of the 28 degree and 37,000,000 gallons of the 34 degree, is that right?

A. 37,000,000 gallons of the 34 degree, of which, however, we could only get 25 per cent. at any time of the total delivery.

Q. What do you mean by that?

A. Well, my recollection of the contract of July 1st, 1904, is that it stipulated that we should take 25 per cent. of the high grade oil, but not that we could take all of that during the few winter months.

Q. I hand you contract Exhibit 10 and ask you to read it over so you may correct your testimony if you wish to?

1706 A. It says here that "this material is to be taken currently."

Q. "As the same may be required of you," that is, the Consolidated Gas Company.

A. My understanding was that we were to take it currently as we required it, of course, both oils; but they were to be taken currently, both oils, as we required them, not one oil in the summer and the other in the winter.

Q. The contract speaks for itself on that?

A. Very plainly.

Q. Did you during the recess refresh your recollection as to how much the actual amount of this rebate or allowance under this old contract amounted to?

A. Yes, $119,000 in round figures.

Q. Instead of $112,000, as I stated; it was my mistake, I misled you.

Mr. MATHEWSON: I thought your figure was too high.

Mr. PAGE: Well, it was too low by $7,000.

The WITNESS: It was $119,000. Not for the Consolidated Gas Company, however, all of it.

Q. Oh, no. Now, having the book with you, can you give us the prices which were charged in that contract that was abrogated by Exhibit 10?

A. The contract abrogated by Exhibit 10 called for oil at one price only, four and three-quarter cents per gallon. I think I testified from memory this morning that it was four and three-eighths.

Q. Yes.

A. I was wrong. It was four and three-quarters.

Q. Can you state from Exhibit 34 for identification how much oil was furnished after the abrogation of the contract calling for oil at four and three-quarter cents which was rebated or allowed for in the $119,000?

A. I am not able to state that just positively from this rec-
1707 ord. The record shows the deliveries of oil under the contract referred to from June 1st, 1904, to September 28th, 1904.

Q. Could not you arrive at it in this manner; the new contract went into effect on the 1st day of July, 1904. You have testified that the first deliveries were made under that contract, and charged under the new contract on the 28th of September, and the deliveries made between July 1st and September 28th would be under the old contract, would they not?

A. On that assumption which——

Q. Well, if the assumption is not correct we do not want to make it.

A. Well, my memory is not very fresh on the subject. I might see how it figures out. The deliveries from July 1st, 1904, to September 28th, 1904, according to this record, amounted to 13,221,784 gallons, and the difference between the price in that contract, 4¾ cents, and the price for low grade oil under the contract that went into effect July 1st, 1904, .71 of a cent, would not indicate a sum approximately $119,000, which was the amount received in adjustment of the prices. It would be something less than that.

Q. Would it be considerably less?

A. Yes. $25,000 less. If you take the oil that was delivered from June 1st, 1904, to September 28th, 1904, 7,780,399 gallons at .71 of a cent, you would get in round figures $125,000. The inference is that between June 1st and the 30th was the point at which this allowance began.

Q. There was some calculation made at the time was there not?

A. Unquestionably. There is no doubt that we received the full amount that we were entitled to.

Q. Is there some communication or other record that is now in the possession of the company showing how that computation was made exactly?

A. No, none that I am able to find. Unquestionably there were memoranda made of it at the time, and the correctness of
1708 the final adjustment established.

Q. Now, when that cash was received—the rebate was paid in cash, wasn't it?

A. Yes.

Q. When that was received, how was it treated on the books of the company, where was it entered?

A. In our cash account.

Q. And then how was it journalized, into what account was it posted?

A. To the credit of suspense account, if my recollection serves me; Mr. Cuthbert went over it; he can probably confirm my recollection.

Q. But you objected to Mr. Cuthbert taking a copy of it, didn't you?

A. I did.

Mr. MATHEWSON: Is that worth while putting on the record?

Mr. GANS: I think it is decidedly. I think it is well for the record to show what limitations were put upon our examination of the books.

Mr. MATHEWSON: There is no objection to your examining books, but we do not want anybody to lug off copies of our books.

Q. Where do you carry the Standard Oil account, in what ledger?

A. Our current account with the Standard Oil Company?

Q. Yes.

A. In the sundry creditors ledger.

Q. You mean, then, in the journal that this account would be credited to the Standard Oil account and charged against cash or charged against suspense account?

A. The question is not very clear, Senator.

Q. Well, in order to transfer this money or the credit for it to the Standard Oil Company, you would have to put it through the journal in some way.

A. To the credit of the Standard Oil Company?

Q. Yes.

A. The credit to the Standard Oil Company would be on
1709 account of the settlement by them of the amount due.

Q. I understand that, but I am trying to get at the book-keeping method of dealing with it?

A. I am trying to explain that.

Q. I thought you had finished?

A. The amount that was due from the Standard Oil Company under this adjustment of prices was a charge against them in the sundry debtor ledger. The payment by them of the cash operated to balance the account.

Q. You said you carried it as an suspense account. I want to know how you got at that then?

A. We charged the suspense account and credited the stock account, the material account, with the amount of this adjustment; and when the charge was made against the Standard Oil Company in the sundry debtor ledger, the credit was to the suspense account,

thereby balancing the amount with which the suspense account had been charged.

Q. Then subsequently in some way I suppose the credit was distributed to the subsidiary companies and the Consolidated Gas Company in its proportionate amounts, is that so?

A. That is the case, yes, sir.

Q. Did this item appear on the regular account of the Standard Oil Company in the sundry creditors ledger?

A. No, it did not. In this case they owed us money whereas their account in the sundry creditors ledger indicates the amount of our obligation to them.

Q. Then you opened a special account for this purpose, did you?

A. In the sundry debtors ledger, where it properly belonged.

Q. Where was the suspense account that you referred to entered? In what particular book was that?

A. The suspense account is one of the accounts in the operating ledger.

Q. And are there other items besides this?

A. A great many items besides that in the suspense ac-
1710 count.

Q. Now, referring to Exhibit 94, the item of expense, $339,999.51, did that include in addition to the ordinary and usual expenses of the company some extraordinary expense for legislative investigation?

Mr. MATHEWSON: He asked if it was an extraordinary expense, Mr. Carter.

A. There were included in that item certain expenses in connection with the legislative investigation.

Q. And they amounted to $77,806.76, did they?

A. No, sir; not in this particular Exhibit 94.

Q. How much of it appeared in Exhibit 94?

A. $21,910.63, according to the statement before me which I have not checked, and therefore am not prepared to say that it is absolutely correct.

Q. Now, that $55,896.13 was distributed to certain other accounts, was it?

A. You are questioning me, Senator, from a document that of course I am unfamiliar with. I know that we did take out of the general office expense account such legal expense as had been carried in there during the year and charged it to the legal expense account.

Q. And this $55,896.13 would appear then in "Advertising and Legal," $105,800.02?

A. Yes, sir, that is where it would appear.

By Mr. MATHEWSON:

Q. Wasn't that "Advertising and Legal" a regular every day account that goes on every day, year after year?

A. Yes, sir.

By Mr. PAGE:

Q. But that account was increased by extraordinary ex-
1711 pense of legislative investigation to the extent of $55,896.13?

A. I am not sure that that is the case and that all of that $55,896.13 was a charge against our legal expense account.

Q. Well, all of that charge was distributed somewhere in the account that appears on Exhibit 94, wasn't it?

A. That I am not sure of because it may be that we billed some other company for some of it.

Q. Well, do you know whether you did or not?

A. Well, I do not from memory recall. That is the reason I do not want to be positive about it and say that all of that $55,896.13 was distributed among our other operating accounts. It may have been and it may be something less than that was so distributed. I want to be somewhat conservative in my testimony.

Mr. MATHEWSON: Wouldn't it be well, Senator, to have it appear on the record that you are questioning the witness from these papers which are notes made by your accountants?

Mr. PAGE: If you wish it so, it may appear.

Mr. MATHEWSON: Merely to show what Mr. Carter means when he says he is not familiar with the documents.

The witness now produces a number of papers and hands them to Mr. Gans.

Mr. MATHEWSON: State what these papers are which you have produced.

The WITNESS: They are statements of station expenses by months for the year 1905.

By Mr. BURR:

Q. For the calendar year?

A. For the calendar year.

1712 By Mr. MATHEWSON:

Q. Each station?

A. Each station for each month, and each month aggregated as to all expenses.

By Mr. BURR:

Q. Manufacturing expenses?

A. Manufacturing expenses.

By the MASTER:

Q. How many sheets do you produce?

A. There are 83 sheets.

Mr. GANS: I ask to have them marked for identification.

The 83 sheets of paper are marked as one Exhibit, State's Exhibit T for identification.

Mr. GANS: The witness also produces tax receipts for the year 1905, consisting of 8 sheets from the Department of Finance of the

City of New York; and one from the Borough of Edgewater, Bergen County, New Jersey. I ask to have those marked for identification.

The nine sheets of paper are marked as one exhibit, State's Exhibit for identification, Exhibit U.

By Mr. GANS:

Q. These 83 sheets comprising State's Exhibit T for identification, are they part of the original records of the company or are they accounts which you have had made from the original records?

A. They are copies of original records, made from original records. They are statements of the operations of the different stations for the stated months.

Q. Are they copies you have had made since I asked you
1713 for this data?

A. They are not. They are carbon copies of this data originally furnished. I usually have two copies made of everything of that sort.

Q. So what was required to comply with my request was to get these from the files of the company?

A. That is the case.

Q. Now in order to prepare what I asked for at the same time, namely an exhibit corresponding with the former exhibit 145 before the State Gas Commission, all that will be necessary would be to take the aggregate of these eighty-three statements, would it not?

A. Such a statement would of course be the aggregate of those statements.

Q. And that is all that is required to prepare such a statement, is it not?

A. That is all. There is some other information, I think, in exhibit 145 before the Gas Commission, that perhaps does not appear in those statements.

Q. Do you remember what that is?

A. No, from memory I cannot say. There is one item that I recall I think in exhibit 145 before the Gas Commission which would show gas made for the Consolidated Gas Company by the other companies, which does not appear there.

Q. That is an aggregate for the year, is it not?

A. I might save time by saying that a statement corresponding to that exhibit 145 before the Gas Commission for the calendar year 1905 is now in course of preparation.

By Mr. MATHEWSON:

Q. Would not that contain all the information that is on the State's Exhibit T for identification?

A. It will, the aggregate for the year; it appearing there in monthly figures and would also contain some things that do
1714 not appear there, which were enumerated; one, the gas manufactured for us by other companies, under the agency agreements, and more detailed as to the sundry supplies used, and as to cartage; and Exhibit 145 includes the distributing expenses which do not appear in State's Exhibit T for identification at all.

Mr. GANS: I think we will save time and prevent encumbering the record unnecessarily if I can be permitted to take these Exhibits for identification and look them over and determine how much of them I want.

Mr. PAGE: You would want to wait, would you not, until this Exhibit which will compare with Exhibit 145 before the Gas Commission is prepared.

Mr. GANS: It will save time if I can take the two things up together.

A further colloquy now ensues between counsel and the Master, which the stenographer is directed not to report.

Q. These tax bills which you brought down, marked State's Exhibit U for identification, represent an amount equal to that appearing on State's Exhibit E opposite the words "real estate"?

A. It should correspond very closely.

Q. Exactly, should it not, unless some mistake has been made?

A. I think they would probably agree within a negligible amount. Of course the amount that is charged in the way of expenses is intended to correspond exactly, and to a penny, with the amount of the tax bills, but there may be a slight variation.

Q. The amount appearing on State's Exhibit E as real estate taxes, being $179,788.95, is the amount of the face of the tax bills rendered by the City of New York for taxes on real estate during that period?

A. That is the case.

1715 Q. And that is somewhat more than the amount actually paid by the company for real estate taxes, is it not, there being a discount?

A. There was a discount, I think, of something like $1,700, which went to the credit of our discount account, which appears in our miscellaneous income account.

By Mr. MATHEWSON:

Q. In Exhibit 94?

A. In Exhibit 94?

By Mr. GANS:

Q. It does not appear under that name in Exhibit No. 96, does it, as a discount allowed on a real estate tax?

A. Not separately stated; included in the discounts.

Q. It is covered in that general item?

A. General item of discounts.

Q. And one could not discover it unless one made some inquiry in regard to the details of the item? That is not intended as a reflection on anybody, but as a question.

A. I think the statement answers that question.

Q. That is true, is it not?

A. Of course it is true.

Q. The amount of that discount is to be found upon these tax bills, in these amounts in red ink, being State's Exhibit U for identification; is that right?

A. That is quite right.

Q. So if you will add these you will get the precise figures?

Mr. MATHEWSON: Why not add the discounts which are also in red ink, and you can tell at once.

Mr. GANS: It is the discounts I was going to add. I have accepted the other figures as being approximately correct.

1716 Q. The exact amount of that discount is $1,702.22; is that right?

A. I already gave you the figure of $1,700, and I have no doubt that $1,702.22 is correct.

Mr. GANS: I offer these bills in evidence.

(The tax bills, being State's Exhibit U for identification, were now received in evidence as State's Exhibit U and so marked.)

Q. Am I right, that you have not included in your statement of the amounts paid for taxes on real estate the amount paid on the Edgewater property?

A. The $870 paid on the Edgewater property seems to have been omitted from State's Exhibit E.

Q. Would that amount mean also that it has not been included in the total in Exhibit 94?

A. It would so appear.

Mr. MATHEWSON: Does that end your cross-examination, Mr. Gans?

Mr. GANS: I do not wish by saying that it will close my cross-examination—from being precluded if something develops in the testimony.

Mr. MATHEWSON: I mean, as far as you now foresee.

Mr. GANS: The matters I mentioned a few moments ago are all I can think of at present.

Recross-examination by Mr. BURR:

Q. Can you give me any explanation of the differences in cost per thousand feet of gas made at the various stations, as they appear here on State's Exhibit T for identification, the rate on 44th Street, being 29.34 and for 14th Street 36.29.

Mr. MATHEWSON: For the same month?

Mr. BURR: For the same month.

1717 A. I would not like to do so without making a detailed comparison of the expenses at the two stations and ascertaining just exactly what the difference was.

Q. I understood you to say that these eighty-three pages contain the cost of labor and material only at each station; is that right?

A. They contain such items of station cost as are enumerated on the statement.

Q. Your attention has been called to Exhibit 105, which was offered in evidence this morning, purporting to be a statement of gas made for the Consolidated Gas Company by other companies, net, for the nominal year ending October 31st, 1905. In that statement there is a variation in the purported cost of gas each month. The

month of the greatest cost for the New Amsterdam Gas Company appears to be July and the cost is 39.66, the Standard for July, 35.31; the Mutual for January, 41.60; the Central Union, October, 44.43. The month of least cost of the New Amsterdam is December, 31.85; the Standard, May, 31.65; the Mutual, October, 34.95; the Central Union, June, 25.85. Can you explain those fluctuations in cost?

A. I could not do so without very carefully analyzing the figures. Offhand I should say that possibly the fact of a considerable amount of repairing occurring within a given month would operate to augment the cost for that particular month; possibly some other conditions might be abnormal in a given month, or unusual, and it would require very careful analysis of the figures to state just what contributed to that variation.

Q. Will you make such analysis?

A. I should be sorry to do so. I have not undertaken to do so.

Q. Can you explain the fact that the increased percentage
1718 of the highest cost over the lowest is as follows:

The New Amsterdam	24%
The Standard	11½%
The Mutual	19%
The Central Union	33%

Can you give any explanation of the variation in that regard?

A. Only in a most general way. With respect to the Central Union Company, their cost in the latter part of 1905 was very much higher than in the first part of the year because of the candle power requirement under the law that went into effect July 1st, 1905.

Q. Are you merely assuming this?

A. I know it to be the case. They testified to it themselves before the Gas Commission.

Q. In regard to which company?

A. The Central Union.

Q. Is that all the explanation you can make with regard to this variation that I have called your attention to?

A. All I should care to make offhand.

Mr. MATHEWSON: There might be a large replacement in one month which goes to the operating expense.

Mr. BURR: I know; it might be a thousand and one things.

Mr. MATHEWSON: Yes, but you asked which particular thing it was that month. We would have to go over all the detail and pick it out.

Mr. BURR: It appears from this statement which has been offered in evidence that the amount of gas or the season of the year makes no difference with regard to this variation in the price or cost of production.

Mr. MATHEWSON: Quite so; a big replacement or repair might be controlling.

1719 Q. Can you tell now the amount of gas used by the Consolidated Gas Company last year for its own purposes?

A. No.

Q. Can you tell me now the total capacity of each of the subsidiary companies?

A. I cannot.

Mr. MATHEWSON: That is on the record, Mr. Burr, the capacity. What do you mean by subsidiary companies?

Mr. BURR: The subsidiary companies.

Mr. GANS: Those operating under the agency agreement.

Mr. BURR: Yes.

Mr. MATHEWSON: Oh, I did not know that they were so subsidiary as that.

Mr. BURR: We have constituent companies and subsidiary companies, and we have been so designating them throughout the course of this examinaation. If I had that information which I called for, we might be able to proceed on that line.

Q. Did you produce the policies of insurance?

A. I have not even considered the printed requests. I only got a copy of it a few moments ago, and certainly I should expect counsel to consider them before I undertook to furnish them.

The MASTER: How do we stand? Has anybody finished with the cross-examination of this witness, or is everybody supposed to be in a state of suspense?

Mr. BURR: I would like, for my own information, so far as I am concerned, to know from Mr. Carter or Mr. Mathewson, to-morrow, whether the information which I have called for is to be produced or whether in the estimation of Mr. Carter, it has already been
1720 produced. If that information is produced, I may or may not have some further cross-examination.

Mr. PAGE: I think it is safer to charge us all up with a suspense account.

Mr. MATHEWSON: You will remember Mr. Burr, that Mr. Bradley was examined on the capacities of the plants of the other companies of the Consolidated Gas Company and testified in detail on that subject, so that it is all on the record, every particle of it. Don't you recall it?

Mr. BURR: The capacity of the subsidiary companies?

Mr. MATHEWSON: Certainly.

Mr. GANS: His testimony was 62,000,000 feet a day.

Mr. MATHEWSON: No, there was an error of 2,000,000 feet there, so it made 60,000,000 and a fraction.

Mr. GANS: Shall we adjourn now?

Mr. MATHEWSON: Let us see if there is not some line apart from these statements that we can examine the witness on. If there are any general lines, I suggest we proceed.

Mr. GANS: If we adjourn I can put in the time to some good purpose by looking over these things and disposing of them.

The MASTER: Is it not possible to get some idea of what we can do hereafter? For instance, if Mr. Carter is to be on the stand all day to-morrow and further statements are to be called for, we ought to know it now.

Mr. PAGE: I did not suppose Mr. Carter was to be brought on the

stand until he got all this information, so that at the next hearing we could end it.

Mr. MATHEWSON: But new information is asked for, including this statement Exhibit 145.

1721 Mr. GANS: I don't think that is new. We spoke of that a long time ago.

Mr. BURR: I think the suggestion a very good one. If you could see your way clear, he might be busy getting out these statements, and be called as the last witness, and when the statements are produced we may have no questions to ask him, or we may desire to ask him some further questions.

Mr. MATHEWSON: Have you any line of cross-examination except that which is dependent on these statements which you have asked for?

Mr. BURR: No, I think not.

Mr. MATHEWSON: Well, this being the case, Mr. Master, rather than lose precious time I will go on and examine Mr. Carter myself to some extent on the redirect, unless you wish to adjourn at the present moment.

The MASTER: I am entirely satisfied to adjourn at the present moment, and do not want to force you on with the redirect unless you wish to do it. I was talking about to-morrow, whether we could go on with some other witness to-morrow. I wanted to get an idea of what these gentlemen's plans are.

Mr. MATHEWSON: I would as soon do this, perhaps as to put on another witness to-morrow. It seems that we have practically concluded the general line of examination, only leaving these statements which when presented may give the information and require no cross-examination at all, and rather than adjourn now, I having no other witness here, I think I would rather examine Mr. Carter a little while, if the Master will permit it to be done out of order, so to speak, saving my own rights, or if the Master desires to adjourn now for any reason——

Mr. GANS: I would very much prefer to adjourn because I

1722 want to be able to look over these things.

The MASTER: I think you had better adjourn now, and you gentlemen had better be prepared to go on with the cross-examination tomorrow and finish it up.

Mr. PAGE: That we cannot do.

Mr. BURR: Unless Mr. Carter is prepared to furnish the information he is asked for.

Mr. KIRBY: And we have to study these things.

The MASTER: Do counsel say that they cannot proceed with the cross-examination to-morrow?

Mr. PAGE: On exhibits that have not been produced and will not be produced until to-morrow morning, and on these eighty-three pages of exhibits that have been handed to us to-day, we state that it is a physical impossibility to prepare for cross-examination.

The MASTER: I think counsel are a little bit unreasonable, and not quite fair to the Master in that particular. First, these 83 pages of exhibit, the witness testified yesterday that they were in his desk

and he has brought them down here and counsel has had several weeks during which this hearing was in progress, and if they wanted those 83 sheets constituting Exhibit T, it was perfectly competent for them to get them at any time. They had their expert there as I understand, as stated by counsel, until he got through and then he went away. No application was made to me for an order directing any books to be brought down, or any papers or anything else. It seems to me it is hardly fair for counsel to let a couple of weeks elapse when we are trying to speed this cause and then state
1723 that they are unable to conclude the cross-examination because they have not had an opportunity to study the case.

Mr. PAGE: There was no statement that we had not had an opportunity to study the case.

Mr. GANS: If the Master will permit me to call his attention to one thing which undoubtedly he has not realized. If you will turn to page 1000 of the testimony you will see that I asked at that stage, or at least tried to ask for precisely this exhibit, and by reason of the fact that I did not frame my question so as to cover technically the thing that Mr. Carter had, I was told that I was mistaken, and that there was no such record kept. And it was only yesterday morning that I discovered that there was a record kept such as I wanted. If you will turn to that part of the testimony you will find Mr. Burr in cross-examining said:

"Q. I call your attention again to the request which I made at the last hearing for a statement as to the cost of holders and so forth. Have you done anything in regard to that? A. No, sir, I have not done anything in connection with the preparation of it.

"Q. You have a statement at the office showing the amount of coal and oil consumed by each station, have you not, during the periods covered by Exhibits 93 and 94? A. Our engineering department records show the quantity of oil used daily, which are aggregated into monthly and yearly totals.

"Q. That would not be in your department, but the engineering department? A. The engineering department.

"Q. And that could be checked up by the accountant, could it not, if desired? A. Yes, very easily."

Then I asked him:

1724 "Q. You do receive monthly reports, including those items from the engineering department to the accounting department? A. No, we do not. As I have already testified, we simply have access to the engineering department records.

"Q. Am I mistaken in this; has it not been your habit to get from the engineering department a statement month by month of the cost of operation of each one of your plants, for the purpose of comparing that statement with a similar statement for the preceding year? A. No, sir.

"Q. Did you not so testify before the Commission? A. Never."

Now, the mistake I made was in suggesting they came from the engineering department. We had simply access to the engineering department.

"Q. Did you not so testify before the Commission? A. Never.

Mr. MATHEWSON: No, he testified that there were certain items, of course, which were compared, that he kept a record of certain items for the purposes of comparison, but nothing showing the comparisons of the total cost of gas at each station." Which should be, I assume, "each station."

Mr. MATHEWSON: Month by month, that is quite right.

Mr. GANS: That is precisely the thing we asked for and precisely what we now get. I do not accuse anybody of intending to mislead——

Mr. MATHEWSON: Exhibit 143 in evidence was the precise thing you asked for.

Mr. GANS: Now this was some time ago. I didn't get it
1725 simply because I was not as well informed of the way this company's records were kept as Mr. Carter is himself and therefore did not ask for it in terms which made it impossible to answer categorically that they had no such thing, truthfully. He said they had not such a thing and I did not get it, as yesterday I stumbled by accident upon the method of asking the question which made it impossible for him to say that they did not have such a thing, and now I have got it. But I do not think that we should be charged with delay by reason of the fact that we did not get it until now.

Mr. BURR: I think it would be advisable, and would save considerable time, if the statements called for are presented when they are made, instead of waiting until weeks afterwards and then presenting them and then expecting a cross-examination to be made immediately upon them. For instance, a statement called for a week ago, instead of when it has been made, laying it up there, it should be produced and we could examine it.

The MASTER: Counsel for the various defendants seem to overlook the fact that a great deal of this work of the preparing statements is done for their accommodation. The position of counsel seems to be that the complainants are obtaining some favor by allowing the proof to go in in this manner. That is not as I understand it. My ruling was in reply to your objection, that you were entitled to have the books brought down here in certain instances for your cross-examination. Manifestly, if those books had been brought down here, judging by such experience as we have had, it would have
taken you gentlemen months to get at the same amount of
1726 information that you got at by statements prepared in the complainants' office, which your experts, as I understand and as I ruled, were to have the opportunity to verify.

Now, it seems to me, if for your convenience, the complainants set their clerical force at work making up statements and your experts have an opportunity to verify them, that you ought not to complain if the statements are not produced here with the rapidity that you like.

Mr. BURR: You will remember I called your attention, Mr. Master, some weeks ago, to the affidavit of Mr. Carter himself, in which he stated that the only time they had a fair chance to give all the information in regard to this company was in 1886. They com-

plained of the dearth of information or opportunity which was afforded them before the Stevens Committee and the Gas Commission. And yet you see it has been like pulling teeth to get the information we desire from them. It is true we might have proceeded legally and asked for the books and it is true it would have taken much longer than 90 days to get that testimony, but we were within our strict legal rights when we asked for the original sources of information, and we only accepted these to facilitate the matter and save time.

Mr. PAGE: It seems to me that we are charged with a good many things that we are not properly chargeable with. In the first place, if the orderly manner of proof that is followed in almost any court that I have had anything to do with, had been followed, it would have been necessary for this company to produce their books rather than put in evidence compilations from the books. The burden of consuming time in proving their case would have been upon them.

1727 We made objections as to the form, and it was only admitted on the ground that we were to have an opportunity for verification. Now they have not produced copies of the books but compilations made from the books, and it has been necessary frequently to consume quite a good deal of time on cross-examination, in raveling out the entries they have made. We have been compelled to proceed here from day to day. Repeated applications have been made for adjournment, even for a day, to allow us to verify the statements that have been put in, while in each instance those applications have been denied. We have been forced——

The MASTER: I do not recall that.

Mr. PAGE: Unfortunately the stenographer did not take those applications upon the minutes, but nevertheless my recollection is very clear as to such having been made, both by myself and Mr. Gans. We have been compelled to go on here from day to day. Mr. Carter left the stand some two weeks ago, it is true. All the time that he has been off the stand has been consumed by from five to six hours a day in taking testimony, and most of the time in preparation for examination and cross-examination of the expert witness they had on the stand. I do not feel that the defendants in this case are properly chargeable with any delay and I do feel that the defendants have been put at a most tremendous disadvantage in the trial of this case, and in the manner in which they have been compelled to proceed.

Mr. BURR: What time will we go on to-morrow?

Mr. MATHEWSON: Do I understand then that we cannot depend upon any cross-examination to-morrow forenoon?

1728 Mr. BURR: Do we understand that we cannot depend upon any information to be supplied by you?

The MASTER: The Court will be in session to-morrow and there is a witness on the stand for cross-examination. If counsel cannot proceed, we will make the proper entry on the record.

Mr. PAGE: I think we have made an application and a suggestion that we would like to have the cross-examination suspended until the statements that have been called for are produced and we have

had a reasonable opportunity to examine them. I would make such an application.

Mr. BURR: Yes, and I make the same application. We certainly cannot go on with the cross-examination until we get the information we have called for.

The MASTER: We will cross that bridge when we come to it to-morrow morning.

Mr. PAGE: I think we have reached it now and I would like to know what we are to do to-morrow if I can.

The MASTER: Well, Senator, I do not wish to seem to be crowding counsel at all but my directions are very explicit in this *letter*, and as I say, some of this information you have had within your power for two weeks to get at if it was very pressing, and if this was trial in any equity term, the Court would sit from day to day and gentlemen would have to prepare for cross-examination either over night or Saturdays and Sundays or some other time.

Mr. PAGE: And that brings up another suggestion, that if this had been a case that had been brought up at an equity term or in Special Terms, counsel would have had some opportunity to prepare
thei case for trial before they were forced on to trial,
1729 & 1730 whereas here we were forced right into trial almost as soon as the issue was joined. I have tried a case *nearly for* two and one half months sitting from nine o'clock in the morning to six o'clock at night, but I was able to prepare that case because I had six months in which to do it.

The MASTER: You must not visit the sins of the equity rules adopted in eighteen hundred and thirty something, or whatever it was, on my head. This is equity practice and the direction to speed the cause comes from a higher source.

Mr. PAGE: Yes, I know, and I think in the desire to speed the case the interests of the State of New York and the City of New York have been lost sight of.

Adjourned to 11.30 to-morrow morning.

Last Exhibits:

Complainant's 223.
State's U.
City's 44.

1731 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,
vs.
JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

Met pursuant to adjournment.

NEW YORK, THURSDAY, *September* 6, 1906—11:30 a. m.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Burr, Mr. Gans.

1732 ROBERT A. CARTER resumed the stand and testified as follows:

Mr. MATHEWSON: Counsel not being ready to proceed with the further cross-examination of Mr. Carter, I will ask him a question or two.

By Mr. MATHEWSON:

Q. Have you prepared a statement separating the items of miscellaneous income for the calendar year 1905 and the nominal year ending October 31, 1905?
A. I have done so, yes sir, as shown in full in Exhibits 95 and 96.
Q. And is this the paper?
A. That is the paper, yes, sir.

Mr. MATHEWSON: I offer it in evidence.
Mr. GANS: Same objection that we have made to the offer of all papers; that is, that if we may be permitted to verify it by the books later we are perfectly willing to have the statement go in now.
Mr. MATHEWSON: This is part of Exhibit 96. The items are on Exhibit 96, which your experts have already verified.
Mr. GANS: In its present form it is objected to as incompetent, immaterial and irrelevant.
Objection overruled.
Exception.
Received in evidence and marked Complainant's Exhibit No. 224.

Q. Will you state how much interest has accrued, computed at five per cent., on the moneys advanced to the Astoria Company for construction by the Consolidated Gas Company?

Mr. GANS: That is objected to as immaterial.
Question allowed.
1733 Exception.
Mr. MATHEWSON: It is claimed by my opponents that the

interest upon the construction of the Astoria plant should be added to construction instead of being charged against operating expenses. I am now showing how much interest has already accrued upon construction, which would go to increase the value of the plant if that method of calculation is pursued; the same as interest at five per cent. was testified to by Mr. Mayer as necessary in the construction of a plant.

A. The interest accrued to August 31, 1906, inclusive, amounted to $1,081,711.44.

Q. That is computed at five per cent. on the advances to Astoria, whether they are evidenced by the stock, the bonds or the notes of the Astoria Company held by the Consolidated?

A. That is the case; yes, sir.

Mr. MATHEWSON: That is all now.

The MASTER: Do you intend to suspend the further examination of Mr. Carter?

Mr. MATHEWSON: I will withdraw him temporarily.

Mr. BURR: Before you do that I have a question I should like to ask.

By Mr. BURR:

Q. With regard to Exhibit 89, is that exhibit intended to show the investment of the Consolidated Gas Company in securities—— I have mislaid the exact exhibit number for a moment, but it is the exhibit which is in evidence here which purports to show the investment of the Consolidated Gas Company in the securities of
1734 other companies. Does that show the investment of the company in all kinds of securities, notes included?

Mr. MATHEWSON: I do not think the witness can reply until you point it out to him?

Mr. BURR: It is State's Exhibit B, page 382-A of the exhibits.

Q. You have the exhibit now in your hand. Will you tell me whether that statement embraces all notes of other companies held by the Consolidated Gas Company, as well as all stocks and securities of every description?

A. No, sir, it does not.

Q. Where does that appear?

A. It would appear in the trial balance of October 31st, 1905, of which you have a copy; also in the balance sheet of December 31st, 1905, both of which have been offered in evidence.

Mr. MATHEWSON: I am ready to proceed with the redirect-examination, but it is not convenient to do so until the cross-examination has been completed, and under the circumstances I shall put another witness on the stand, withdrawing Mr. Carter.

The MASTER: Note on the record that the other counsel state they are not ready to proceed with the cross-examination this morning.

Mr. GANS: Note that one of the reasons why counsel say they are not ready to proceed, and one of the reasons why they are not ready to proceed, is that one of the exhibits called for for the purpose of cross-examination has not been produced, that another exhibit of 83 pages, which was handed to counsel for the defendant yesterday, is

of such volume that it makes it impossible to proceed with the cross-examination until opportunity has been had to inspect it; that the delay in procuring that exhibit, as was pointed out yesterday,
1735 was due to the fact that a misleading answer was given by the witness to a question some two or three weeks ago.

Mr. MATHEWSON: That is a nasty and uncalled for intimation. It is not true, and it should not have been made.

Mr. GANS: Well, it is true.

Mr. MATHEWSON: It is not true. It is absolutely untrue.

The MASTER: Well, never mind, gentlemen.

Mr. MATHEWSON: I want to say, if the Master please, right here, that I had not intended to make any issue of this, but that exhibit which we are called upon to produce for the calendar year of 1905, corresponding to the nominal year of 1905, has for the nominal year been before counsel ever since this hearing began, in the printed record, and if we had been requested to produce it or make it up for the calendar year weeks ago, it could have been done. The delay in requesting it was not attributable to us.

Mr. GANS: I did not mention the delay in that, but I will say in reply to that, that a request was made, if not on the record, then to Mr. Mathewson and to Mr. Carter off the record, for that particular exhibit.

Mr. MATHEWSON: I think you are mistaken, Mr. Gans.

The MASTER: Well, there is no question before me now. You can proceed, as long as Mr. Mathewson is willing to take up another witness.

Mr. BURR: I understand Mr. Mathewson is going to take up with me later in the day the information which I asked for, and which was spread upon the record yesterday.

A further colloquy now ensues between counsel, which the
1736 stenographer is requested not to report.

WALTER R. ADDICKS, a witness called on behalf of complainant, being first duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside?

A. In New York City.

Q. Are you an officer of the complainant, the Consolidated Gas Company?

A. I am, sir.

Q. What office do you hold?

A. Vice-President.

Q. Are you the chief executive officer of the company at the present time?

A. Chief active one.

Q. The office of President is at present vacant, is it not?

A. It is.

Q. How long have you been an officer of the company?

A. March, 1903, if I recollect correctly.

Q. Are you a graduate of any collegiate or technical institution?

A. United States Naval Academy, Engineering Corps.

Q. What year?

A. 1882.

Q. How soon after your graduation in 1882 did you leave the navy?

A. I stayed in the service about a year and a half, and entered the service of the Pennsylvania Railroad, motive power department.

Q. In what corps at Annapolis were you graduated?

A. In the Engineer Corps.

Q. Will you state what your experience as an engineer was thereafter?

A. I, having entered the service of the Pennsylvania Railroad, was attached to the Motive Power Department for about four years, during which time I worked as draughtsman on car construction, locomotive construction, construction of boiler house, round
1737 house, valuation of certain portion of the Altoona plant, and made the surveys of all the shops and shop yards in the Pennsylvania Railroad system, east of Pittsburgh and Erie.

Q. Were you employed in designing motive power and car equipment, and the like?

A. Yes, sir.

Q. Did you subsequently go to Boston as engineer for any company?

A. I left the Pennsylvania Railroad Company and entered the service of the constructing company that was building the Bay State Gas Company of Boston, during which time I spent some three months in Chicago in the gas works.

Q. Were you engineer for this construction company?

A. Not at first.

Q. At any time?

A. Yes. Later I became engineer for that company, and became engineer of the gas company after the works were completed and had been started; the Bay State Gas Company of Massachusetts.

Q. Did you have any experience in the practical operation of a gas plant before that?

A. Yes. In Chicago I ran the gas generators and did all other work that was necessary in the gas works personally; took the regular watch night and day for a period of three months.

Q. What other gas companies or lighting companies have you been engineer with between the time you have last mentioned and the time you became an officer of the complainant company here?

A. I became in succession, more or less exact as to date, engineer of the Roxbury Gas Light Company, Dorchester Gas Light Company, South Boston Gas Light Company, the engineer of distribution of the Boston Gas Light Company, Superintendent of the North End station of the Boston Gas Light Company, Engineer of the Boston Gas Light Company, Chief Engineer finally of all the
1738 companies mentioned; also of Brookline Gas Light Company, and the Consulting Engineer for various works in connection with the New England Gas and Coke Company and the Massachusetts Pipe Line Gas Company. I have also been Consulting Engineer for other companies, large and small.

Q. How does the Boston Gas Light Company of which you were Chief Engineer stand as to size among the gas plants in New England?

A. It is the largest one in New England.

Q. That is a coal and water gas plant?

A. Well, the North End station was the largest individual plant and the company itself today is the largest company.

Q. These companies which you have mentioned, the Roxbury, Dorchester, etc., are what are known in Massachusetts as the Boston or "Metropolitan Group?"

A. Well, they were known formerly as the "Boston Group" and "Brookline Group," there being two groups, Jamaica Plains being included in the Brookline group. They now constitute the Consolidated Gas Company of Boston, with the exception of the New England Company.

Q. Are you a member of any engineering societies and have you held offices therein?

A. I have been and am a member of quite a number: the American Society, the Ohio Society, the Western Society, New England Society, of which I was formerly President, the Guild of Gas Managers, of which I was President, Society of Gas Lighting in New York City, and others; and also naval societies, quite a number of them, naval engineers and naval architects and so forth.

Q. Are you familiar with the manufacturing plants, holders and distributing system of the complainant, the Consolidated Gas Company of New York?

A. Yes, sir.

1739 Q. And with the prices of manufacture and distribution of gas generally?

A. Yes, sir.

Q. Both water and coal?

A. Yes, sir.

Q. Are you familiar with the requirements of the Act of the Legislature, the Act of the Legislature passed within the last year or two, limiting the pressure in mains of the company between two and one-half and one inch?

A. I am.

Q. I will ask you—based upon your knowledge as an engineer, and particularly in the gas business, whether it is possible in your judgment to observe those requirements and furnish your customers with gas in the City of New York?

Mr. PAGE: That is objected to as calling for a conclusion.

Mr. BURR: The same objection.

The MASTER: I will allow it.

Exception taken by Mr. Page and Mr. Burr.

A. My judgment is that it is practically impossible to conform to the requirements of that law as to pressure.

Q. Now, as to the provisions concerning sulphur and ammonia, in the same acts?

A. There is no difficulty in conforming with the requirements as

to ammonia, nor do I foresee any. There is no difficulty at present in conforming with the sulphur requirement, but it restricts us somewhat to the character of coal we can use.

Q. Does it require the use of more expensive coal or less?

A. Apt to be more expensive. The coals which have a large amount of sulphur cannot be used and still maintain the 20 grains required by that law. That law is being modified in other parts of the world. It is the same as in Massachusetts, in so far as sulphur is concerned.

Q. The tendency under ordinary circumstances is to in-
1740 crease the cost of manufacture?

A. No, I cannot say that in New York to-day. In view of the constantly increasing quantity in which poor coal will undoubtedly have to be used, it will tend to increase the cost of gas in future, but I cannot say that it will tend to increase the cost of gas to-day. When I say that, I say not materially, in the case of water gas.

Q. Has the complainant ever made tests of the amount of gas burned in the street lamps, the city contracts calling for three feet per hour, to determine whether more or less than that amount was being burned?

A. Yes, sir.

Q. What was the result of those tests?

A. In the Welsbach burners——

By Mr. GANS:

Q. Were those tests made by you individually?

A. No, under my direction.

Mr. GANS: Then we object on the ground that it is incompetent.

The MASTER: I will allow it.

Exception taken by Mr. Gans.

A. (Continuing:) In the Welsbach burners 3.77 cubic feet per hour, I should say. May I elaborate a little in the answer?

By Mr. MATHEWSON:

Q. Anything that you think is necessary to answer the question properly.

A. That was done by taking the street lights off various points and testing them as they stood. It is within the power of the lamp lighters to burn anywhere from 3 feet to 6, if I remember correctly, under 2.2 pressure, but the average that we took off was 3.77 in the condition in which we found them.

1741 Q. That was the average?

A. That was the average. The flat flame burners we tested also by taking one of the burners that were in use and testing it with the gas going through at various pressures. If I remember correctly, it is about 4½ or about 4.6 feet which passed through a burner which was adjusted to three feet. I would like to check my 4½ feet, if it is necessary.

Q. Were those tests made under your direction and general supervision?

A. They were made under my specific instructions for the purpose of determining this question.

Q. Who purchases the coal and oil, or under whose supervision is it purchased, used by the Consolidated Gas Company?

A. The contract was made by me on the question of oil. As to the coal contract, the bids are ordinarily asked for by another officer of the company and come under my supervision, and I submit them to the executive committee.

Q. Are bids sought in reference to the supply of coal?

A. Yes.

Q. From any responsible parties who you may think able to deliver it?

A. Or who have a quality of coal satisfactory in quantity.

Q. Assuming of course the quality of coal must govern?

A. Yes, sir.

Q. And is the purchase of this coal made at as low prices as you can obtain it?

A. Yes, under the conditions required.

Q. How as to the oil?

A. The oil likewise, sir.

Q. It is in evidence that a contract of the Standard Oil Company, which would have expired early in 1906 was superseded on November 1st, 1905, by another contract calling for 40 per cent. of 34 degree grade and 60 per cent. of 28 degree grade oil.

A. That is correct.

Q. Did you negotiate the contract?

A. I did.

1742 Q. Did you make any endeavors at that time to secure as low a rate as possible?

A. I did.

Q. Was the price which was finally covered by the contract the same which you sought to obtain at the outset?

A. It was not.

Mr. PAGE: Would it not be just as well to let the witness testify as to what he did?

Q. Go ahead and testify as to the circumstances under which that contract was made, and the necessity in your judgment which made such contract advisable at that time.

A. The matter arose by the engineer in chief stating to me that he could not meet the requirements of the new law, as to 22 candle power, with 28 gravity oil during the winter months. I therefore took up negotiations for supplying a lighter grade of oil during the winter months. Those negotiations resulted in the contract which I understand is in evidence, which specifically provides for a light grade of oil during the winter months and a heavy grade of oil during the summer months. It was necessary in that contract to pay for the heavier grade of oil 4.28 cents per gallon, I think, and for the light grade of oil, 4.78, I think, or thereabouts.

Mr. PAGE: 4.29 and 4.87½.

Mr. MATHEWSON: May I have the contract, Mr. Master, which I think you have?

(The contract is produced and handed to the witness.)

A. (Continuing:) Referring to the contract itself for oil, City's Exhibit No. 30, contract dated November 1, 1905, the price for 34 gravity is 4.875, and the price for 28 gravity is 4.29. This is a substantial advance, between 4 and 5 per cent., over the prior contract.

1743 I will say that the percentage, it will be noted, can be varied from 40, 45 and 50 per cent. of 34 gravity oil. It was doubtful in my mind whether we could get through with 40 per cent. during the winter season, so that the other amounts are provided for, the object being on my part to get the lowest average price of oil for the entire year, which in this case I believe figures about 4.50 or 4.52, or something of that kind.

Q. The previous contract, City's Exhibit No. 10 called for what percentage of 34 degree oil?

A. May I refresh my memory?

Q. Certainly?

A. 25 per cent.

Q. And was it your judgment that that proportion would be insufficient to maintain the higher candle power during the winter?

A. Yes, sir.

Q. The question has been asked in previous testimony as to why this contract was made at this time, when the entire 177,000,000 gallons called for by City's Exhibit No. 10 has not been delivered?

A. It was for the reason that I have stated, on account of the requirement of 34 gravity oil during the winter months. It was necessary to have that gravity.

Q. But it is in evidence that 25 per cent. of the 177,000,000 would represent over 40,000,000 gallons, and less than 10,000,000 gallons of the 34 gravity had been delivered on November 1st.

A. Yes, I understand that.

Q. Now, what is the explanation?

A. The explanation is that the contract provides——

Q. Which contract?

A. That the contract of April 26th, 1904, requires that this oil should be delivered currently.

Q. What do I understand you to mean by that, that it should be delivered currently?

A. That we had the right to call for 25 per cent. of 34 grade and 75 per cent. of the heavier grade currently from time to time. If

1744 we did not exercise our option for the 25 per cent., and were able to use the low grade oil, it did not mean that we could call upon the Standard Oil Company for 25 per cent. in bulk at any time and then leave it to the Standard Oil Company to deliver the 34 grade all the time, for the whole year.

Q. That was your understanding of the contract?

A. Yes, sir.

Q. What position was taken by the Standard Oil Company in reference to that clause?

A. They took that position in regard to it.

Q. Did you take legal advice as to your view, to ascertain if it was correct?

A. I conferred with counsel in all these matters.

Q. And was it on that legal advice, or after it, that you made that contract of November 1st?

A. Yes, sir.

Q. The contract of November 1st, being City Exhibit No. 30, covers what period, and requires delivery of oil for what period?

A. June 30th, 1908, was the expiration of the contract.

Q. Two years and 8 months?

A. Two years from November 1st. Our option in regard to the quantity of 34 gravity must be given in April, I think, of any year.

Q. It has been suggested that you tell what occurred in connection with this contract. I would like to have you state what the price sought to be charged by the Standard Oil Company was, which you say you refused, and any other considerations which influenced you to make this contract of November 1st, Exhibit No. 30, at that time and for that period.

A. In the first place, we had to have 34 gravity oil. The price asked, as I remember it, was a half a cent more in advance.

Mr. PAGE: When you say the price asked, if you are going to give conversations, let us have with whom they were.

1745 The WITNESS: I am not going to give conversations, simply going to give the price asked.

Q. You are obliged to state in substance what was said, not in words.

Mr. PAGE: Whom he had any conversation with, and as near as he can recall what was said on each side.

The WITNESS: I will be perfectly willing to give it, but it will be very difficult for me to remember it.

Q. Simply in substance.

A. The contract was made with Mr. Higgins of the Standard Oil Company at the price and under the conditions that we put in the contract. During the period of negotiations I also had conversations with others, in connection with the question of the supplying of this quantity of oil during the winter months, and their ability to perform such a contract. There were two other gentlemen, I think, Mr. Tilford I think was one, and I have forgotten the name of the other official. I raised this question of the absolute necessity for having 34 gravity oil, and they expressed doubt as to the Standard Oil Company's ability to make such a contract and they took the matter under consideration. They finally said that they would make the contract, but that for the current year they could not agree absolutely to give the 40 per cent. They did not know whether it was possible for the Standard to do it and that is the reason that that provision appears in that part of the contract.

Q. What provision?

A. Why, in regard to 18,000,000 gallons.

Q. Just state it.

A. The result of that was that this paragraph was put in:

"In the event of your requirements, November 1st, 1905, to March

31st, 1906, being for a greater quantity of 34 gravity oil than
1746 18,000,000 gallons, we are to have the privilege of substituting for such excess oil of lower gravity than 34 degrees, but not lower than 28 degrees."

However, they did fulfill that portion of the contract.

Q. What was the amount which was first stated should be charged for oil under the new contract, or in connection with the new contract?

A. A half a cent higher than the current price, as I remember it.

Q. And the contract is made for a quarter of a cent advance?

A. A quarter of a cent, and the provisions in regard to winter and summer deliveries are specifically set forth in the contract.

Q. Was the subject of the price of oil in the future mentioned, or the probable price, and did that have any influence on your mind?

A. It was mentioned.

Q. State it?

A. My disposition was to take what 34 gravity we could at such price that we would have to pay, rather than make this contract at this time. They told me that the price of oil was advancing and that it was necessary for us to provide for our very large demand for 34 gravity oil, if we wanted it; that otherwise other contracts would be made with others and the supply might not be available for us.

Q. And as the result of these negotiations this contract, City's Exhibit No. 30 was made?

A. It was.

Q. I will ask you whether, considering the circumstances, in your best judgment, the making of that contract was a judicious business thing?

A. Unquestionably.

Q. If the Standard had refused to furnish 34 gravity oil under the previous contract during the winter months, on the construction that such a call would not be to furnish it currently, had you
1747 any other source from which you could procure the amount of oil required?

A. I know of none, sir.

Q. In reference to the purchase of material which is bought under your supervision, I want to ask you generally whether you make efforts to get the lowest prices possible?

A. Certainly.

Q. And are any purchases made which in your judgment are not necessary to the operation of the company?

A. No, sir, they are not.

Q. How as to wages and payments for labor, as far as you are familiar with them? That is, as to the number of men employed and the amount paid to them?

A. Every effort is made to make gas in the most economical manner both as to labor and material and as to the price paid for labor; whatever the ruling rate may be, or whatever may be absolutely necessary for us to pay, determined by the question of supply and demand.

Q. Mr. Bradley heretofore testified in reference to certain expenditures at Astoria and, without his figures, he said from recollection that the total estimate for the first unit at Astoria, including land and tunnel, was something over $13,000,000. Were those figures made up by him and you in conjunction, or were they made up in consultation with you?

A. They were made up by Mr. Bradley and I consulted Mr. Bradley in regard to them.

Q. In his absence, have you the figures here?

A. May I have Mr. Bradley's figures, Mr. Mathewson?

Q. Mr. Bradley had no figures with him, but he stated that his recollection was that the amount was about $13,100,000 as I recall it, possibly $13,096,000. Will you state what the exact total amount of the latest estimate is of the items regarding which Mr. Bradley was testifying?

A. This detailed estimate which includes real estate and
1748 tunnel amounts to $13,134,519.65, but it does not include certain other items which I have data in regard to.

Q. Mr. Bradley stated in his testimony that there were certain other items which were not included, some of which he mentioned. Will you state all the additional items beyond the amount which you have mentioned, which will or may be included in the first unit, with the estimate as to each as nearly as you have it?

A. These items aggregate the total of $2,582,500.

Q. Will you give them in detail?

A. As follows:

Coal storage bridge	$150,000
Foundations	80,000
Rope haulage system	45,000
Coke storage plant at Astoria	50,000
Scows and tugs for transporting of coke to New York with coke unloading and distributing station in New York City	500,000
By-product plant	300,000
Grading and filling	50,000
Switch yard to connect with the Long Island Railroad extension	70,000
Dwellings for company's employees	300,000
Stables, horses, harness and wagons	10,000
Steel work for the second holder in the tank under construction	700,000

Q. That is the 15,000,000 foot holder?

A. 15,000,000 cubic foot holder. Undistributed expenses, 10 per cent., on $2,255,000, $225,500; 10 per cent. on items one and two, undistributed expense not heretofore included, $102,000. Total, $2,582,500.

Q. Now the undistributed expense on Items One and Two refers to Items which were included in the $13,134,519.65 total, but upon which the items in course of construction had not been computed?

A. Items One and Two are the items of coal sheds and 60-inch

mains, being items aggregating $1,020,000 which were not
1749 included in the estimates prior to putting in the 10 per cent. for undistributed expense, and therefore subject to an increase of 10 per cent.

Q. You mean before computing the 10 per cent., which entered into the $13,134,519.65?

A. Yes, and on the $9,321,783.66.

Q. On all other items on construction except these two items does the $13,134,519.65 which you have mentioned include the 10 per cent. engineering or undistributed expense as you understand it?

A. No, it does not. It does not include 10 per cent. on the real estate.

Q. That is not construction account?

A. I beg pardon, you used the sum $13,134,000, and I thought as long as that included the land, there would be a question about that.

Q. No, I said covering construction.

A. I think that is so. There are some additional items here which entered into construction, such as the cement for gas holder tanks, and overhead gas mains which did not appear in the original estimate. They were left out by error and they are in excess of the 10 per cent. They did not enter into the 10 per cent.

Q. These items for construction which you have specified which aggregate $2,582,500 and which are in addition to the $13,134,000, will you state which of those in your judgment will be required in connection with the first unit as distinguished from those which may be required, possibly?

A. Will you pardon me if I refresh my mind?

Q. Yes.

A. The item of scows and tugs for transporting coke, coke unloading and distributing station in New York will undoubtedly be required for the first unit.

Q. How much is that?

A. $500,000. The by-product plant, $300,000, there is a ques-
tion about. It has always been included in the additional
1750 unit beyond 20,000,000, but it depends somewhat upon the question whether we will be able to make a favorable contract for by-products.

Q. If not, you will have to have the plant?

A. If not, we will undoubtedly have to have a by-product plant to manufacture other products. The switch yard connecting the Long Island Railroad, I cannot be sure that we are going to have it immediately, but we are having the engineers of the Long Island Railroad or engineers recommended by them lay out our present yards to connect with such an extension. That will amount to $70,000. The dwellings for company's employees, $300,000, is a question which is a serious one. We undoubtedly will have to take care of the important employees of the company, but to what extent that $300,000 will be required, I would not like to state.

Q. Are there facilities at present adjacent to the plant for taking care of these employees?

A. No, sir, there are not. There are no houses within quite a long distance. I don't know how much in actual length.

By Mr. PAGE:

Q. There is quite a village right across the water, isn't there?

A. Yes, sir, but there are no ferry facilities going to it. Temporarily there is a tug running from one of the wharves across to Astoria. Stables, horses, harnesses and wagons, $10,000, is a very moderate figure.

By Mr. BURR:

Q. Will that be required or may it?

A. I don't think there is any question about it. It is a very moderate figure. Steel work for the second 15,000,000 cubic foot holder, $700,000, merely hinges on the question whether it
1751 is wise and proper to run a 20,000,000 gas plant with one holder with the possibility of that holder getting out of order at any time.

By Mr. MATHEWSON:

Q. What is your own judgment on that subject?

A. Well, $700,000 is a lot of money to spend. I would want the holder and I hate to spend the money. A second holder ought to be there. It was fully intended it should be there as soon as this other one was finished.

Q. In your judgment, would it be prudent to erect that holder in connection with the other holder, rather than rely upon a single holder?

A. Oh, there is no doubt about that. I don't like the idea of running a 20,000,000 works with one holder.

Q. What about the coal storage plant, bridge and foundation at Astoria, will those be required?

A. The coal storage bridge will be required undoubtedly, in duplicate, for the same reason, if one bridge breaks down, our method of handling coal is crippled. It is supplemented in this particular case—our bridge plan contemplates the rapid unloading of the coal to some extent from the main coal pile, and the question of transferring of this amount of very important material, I think there should be two bridges, I should say the second bridge ought to be included.

Q. Bridges are $150,000, according to the estimate each?

A. Yes, sir.

Q. To what do the foundations relate?

A. I cannot answer that question, nor the rope haulage. I have known but I have forgotten the exact application of it, so I do not want to testify to it.

Q. How about the construction of the Astoria plant?

A. Every contract that is made in Astoria, the bids are asked for by Mr. Bradley, as I think he testified, and when they
1752 come before me I take them to the executive committee and the officers do not act on any contract until the executive com-

mittee of the Consolidated Gas Company signifies their approval of the contract.

Q. That refers to all contracts for Astoria construction?

A. Yes, sir. Latterly there has been the necessity of very urgent work in small ways, and it has necessitated giving out contracts which are now limited to anything less than $1,000.

Q. The Executive Committee of the Consolidated Gas Company passes upon all before they are put into effect?

A. Yes, sir.

Q. Are these contracts let in competition?

A. Yes, sir, there is one—if that answer covers every contract that is made, I want to eliminate one.

Q. Well.

A. With the exception of one contract, which is the only one I can think of.

Q. Speak of it now.

A. The contract for the inclined retort house was let to Bartlett, Hayward & Company, they being the only builders in this country of inclined retorts that we had confidence in. The two installations that were put up by the Central Union, one by Bartlett, Hayward & Company and one by another concern, the Bartlett, Hayward stacks stood and the other one didn't.

Q. Have you considered from an engineering standpoint, Mr. Addicks, the question as to the cost of gas at Astoria, whether it can be made at a lower figure than the average which is produced now in Manhattan?

A. Yes, my simple judgment in engineering, not in the small details.

Q. What is your judgment upon that?

A. It depends largely upon the handling of the coke in Manhattan and the demand for coke.

Q. Well, assuming that the coke meets a reasonable market at a reasonable price, do you then think from an engineering standpoint that the gas at Astoria can be produced at a lower figure
1753 than the water gas is produced in New York City now?

A. No, not the water gas, but I think it can be and will be produced undoubtedly at a less figure than the coal gas in Manhattan, of course assuming in both cases it is 22 candle-power. Of course, you must not consider the unenriched coal gas there, and compare it with enriched coal gas here; but gas for gas, I think it ought to cost less in Astoria; but that judgment must be qualified on the question of cost of handling coke from Astoria into Manhattan, which is not a simple proposition. It is not like handling coal. Coke is a peculiar product. Gas coke particularly breaks up readily and it is difficult to handle it by manual labor. Of course, men have to use forks to handle it and hannot handle as much as coal, and my experience is they do not like to handle it at all. So it is absolutely essential in the Astoria proposition to handle it all mechanically, and that has not been done yet to my knowledge and that we will have to work out. I think the cost of gas in Astoria for the first year will undoubtedly be more than the cost of gas in

Manhattan, but I should not state that beyond the first year until we get shaken down.

Q. You are referring to a comparison between that gas and coal gas?

A. Only coal gas at 14th Street and 42d Street.

Q. As there is only one-fifth of the entire output which is coal gas in Manhattan?

A. About that, yes.

Q. The substitution of coal gas produced at a cheaper rate would affect in comparatively small proportion the cost of the total output of the company, wouldn't it?

A. In proportion to what the coal gas it displaced was to the whole amount of gas sold.

Q. How long ago was the construction of this plant at Astoria begun?

A. Before I came here. I came here I think in March, 1903.

1754 Some work in grading had been done before that, but the primary contracts were given out, I think, the summer I came here, because I was asked when I first came here to go over all the plans of the works laid out and see if I could suggest any better plans; so it had not been advanced far enough but what changes could be made.

Q. To what purpose will the first unit be put when completed?

A. The extension for the supply of gas for our present output.

Q. Of your present sales?

A. Yes, sir.

Q. It will not be a replacement?

A. No, sir, that is not the idea.

Q. To take care of the gas which you procure from other companies amounting to about 3,000,000,000 feet per annum?

A. Yes, sir, roughtly.

Q. That would leave a margin to cover about how much increase?

A. Roughly 1,000,000,000.

Q. That is, a billion?

A. Yes, which represents about—which one thousand millions represents about six per cent., I think.

Q. I want to ask you, from your knowledge of the requirements of Manhattan and your experience as an engineer, whether you consider the construction of this first unit at Astoria was a prudent and wise action on the part of the company?

A. I think it was absolutely essential.

Q. Have you made an estimate of the value of the Manhattan plants of the company, including the holders, manufacturing plants of the company, based upon your knowledge as an engineer and your experience in the gas business and your familarity with the cost of gas construction as it has been involved at Astoria?

A. I did.

Q. What is your estimate of the cost of reproduction of those plants including the 18th Street plant so far as it has been taken by the city?

1755 Mr. PAGE: What does this include?

Mr. MATHEWSON: The Manhattan plants.

The WITNESS: It includes all the Manhattan plants; it includes 18th Street and includes all the city took at 18th Street. It is about $16,800,000.

Q. Does that include any interest in course of construction?

A. No, sir.

Q. Will you assume a year's interest at the rate of 5 per cent. on that construction?

A. Exactly or approximately?

Q. Give it to us with fair approximation. Five per cent. on $16,800,000.

A. About $840,000.

Q. And that added to $16,800,000 would make a total of how much?

A. $17,640,000.

Q. I want to ask you whether the item of interest in your judgment is to be included in the estimate of the total cost for plants?

Mr. GANS: I object to that as not a question for an expert's testimony.

Q. Well, how long would it take to construct plants, if in Manhattan, Mr. Addicks.

Mr. GANS: I suppose that depends upon how many men you put on the job?

A. It would depend upon a good many things.

Q. Under ordinary conditions, would it take as much as two years or three years, do you think?

A. Oh, yes, it is a question in my mind whether it would be three to five years. I should rather say five years. Astoria now has been under construction in one plant from 1902 until date. Now all that work is concentrated in a single plant. But when you distribute that over five or six, I think it would take longer. I would not like to be limited to a specific engineering answer to that because
1756 it is a matter of conjecture and judgment to some extent. It would not be shorter that Astoria, certainly.

Q. Have you made an estimate of the cost of gas based upon exhibit 94 for the calendar year 1905 including any other items which should be allowed, if any, in your judgment?

A. Yes, sir, I have.

Mr. PAGE: Would it not be better if this witness should testify to the cost of gas based upon his knowledge and experience rather than limit it to the figures which have been put in here by their accountant?

Mr. MATHEWSON: I accept that.

Q. Based upon your experience and knowledge in the gas business?

A. Of course including my experience with the Consolidated Gas Company (producing paper.) Have you a copy of this?

Q. Have you prepared it in the shape of a table, Mr. Addicks?

A. Yes, sir, I did.

Q. Well, I think I will have you put that on the record in the form that you have it as a foundation.

A. My answer is as follows:

1757 CONSOLIDATED GAS COMPANY—GAS BUSINESS—1905.

By Exhibit No. 94, Cost of Gas Delivered			74.81¢
Deduct Fixed Charges	7.32		
" Taxes, account other Companies.	.48		
" Contingent	10.00		
		17.80¢	
Add—Actual Replacements	2.12		
" For Enrichment	1.83		
" " Repairs and Renewals	4.62		
" " Labor	.78		
" " Reserve	3.00		
		12.35¢	
Net Deductions		5.45¢	5.45¢
Net for Calendar Year			69.36¢
Receipts from Gas		102.03	
Miscellaneous Income		1.30	
Dividends:			
National Coke and Coal Company		.04	
			103.37¢
Difference for Calendar Year			34.01¢
Deduct Fixed Charges			7.32¢
Difference			26.69¢
Deduct 20¢ per 1,000 for an 80¢ rate			20.00¢
Remainder applicable to Dividends			6.69¢

Recess until 2.15 o'clock P. M.

1758 After Recess.

2.15 P. M.

WALTER R. ADDICKS resumed.

Direct examination by Mr. MATHEWSON continued:

Q. Referring to the statement which you placed upon the record a few moments ago, I observe that you have in procuring the 69.36 cents net for the calendar year, deducted from 74.81 cents which was shown in Exhibit 94, fixed charges, the proportion of taxes that is applicable to securities of other companies or dividends paid on them, the contingent of 10%, and that you have then added 2.12 for replacements, 1.83 cents for enrichment, repairs and renewals 4.62 cents, labor .78 cents and reserve 3 cents. Now the 2.12 cents

represents, as I understand it, the actual amount of the replacements for the calendar year; is that correct?

A. Yes, sir.

Q. What is 4.62 cents?

A. That represents the difference between repairs and renewals for the calendar year, and repairs and renewals for a period prior to the purchase of gas from other companies, a period of five years.

Q. What period of five years did you take?

A. Ending 1900, I think; five years prior to that.

Q. That represents a period during which the company procured no gas from other companies and will represent the situation when the company manufactures all its own gas by this new Astoria unit, does it?

A. That was the purpose.

Q. And do you remember what the renewals and replacements average in the five years to which you refer?

A. 12.31 cents from 1895 to 1899; not 1900, as I stated.

1759 Q. That compares with the average of 10.89 cents, average renewals per thousand, for the twenty years ending December 31, 1904, does it, of which we have had testimony?

Mr. PAGE: Objected to. I don't remember that in this case there has been testimony on that particular proposition.

Mr. MATHEWSON: Oh, yes, there has. There is an exhibit in evidence showing it.

The MASTER: Well, it is a conclusion, anyway. Isn't it a matter of argument?

Mr. MATHEWSON: No, I merely ask him whether that is the corresponding item for those five years.

The MASTER: Would not that appear on the face of the two statements or whatever there is in evidence?

Mr. MATHEWSON: No, it would take a computation for those five years. The figures are before the Master but he must compute the result. That it all. I do not desire to push it any further but merely to identify it as being the average for the five years in question.

Q. What does 1.83 cents represent?

A. That represents an additional cost of enrichment over and above that enrichment for the calendar year 1905, due to the increase in statute in regard to candle-power.

Q. The year 1905 included the first six months of the old 20 candle power which we maintain and the last six months of the 22 candle power?

A. Yes, sir.

Q. And this represents a year in which the 22 candle power will be maintained throughout the year?

A. Yes, sir; as they did not maintain in 1905 throughout the year.

1760 Q. What is .78 cents for labor?

A. That is the difference between the cost of labor for the prior four years and the cost for the calendar year.

Q. And the 3 cents reserve?

A. It is a reserve that was taken before the Gas Commission; the minimum figure that was used at that time.

Q. That is an arbitrary figure, is it?

A. Yes, sir.

Q. Do you consider that to be a reasonable figure?

A. Well the ten cents contingent is what I consider a reasonable figure which includes the three cents reserved and all these other matters.

Q. But you have deducted 10 per cent. for the purpose of this computation here?

A. Yes, sir.

A former question which was unanswered is now put in the following form, without objection.

Q. That corresponds with the average of 10.89 cents average renewals per thousand for the twenty years ending December 31st, 1904, does it, of which we have had testimony?

A. Yes. It merely takes a period of five years in place of the whole twenty.

Q. Now, in the tabulation following the 69.36 cents you have receipts from gas 102.03 cents?

A. Yes, sir.

Q. Does that include the amount charged the city for the maintenance of public lamps, as well as for gas furnished to the city?

A. Yes, sir.

Q. That item is not separated?

A. No, sir.

Q. And the miscellaneous income, 1.3 cents, does that include the entire miscellaneous income of the company?

A. Yes, sir, in connection with the gas business.

Q. And the National Coke & Coal Company dividend of .04 cents, what does that represent?

A. That is the $5,000 divided by the sales. It is not quite .04 cents, but that is the nearest figure——

1761 Q. And the 34.01 cents is the difference between the total receipts as so calculated and the amount chargeable to the cost of gas, 69.36 cents?

A. Yes, sir, leaving a balance of 34.01 cents.

Q. Does this miscellaneous income 1.3 cents include the rent from real estate, of the tenements?

A. Yes, sir.

Q. And also from gas stoves, rentals of gas stoves?

A. Yes, sir.

Q. Now, in Exhibit 94 there appears 10 cents per thousand charged which has been explained as including actual replacements and also covering contingencies. Which of these items which you have specified in the statement just before us would be included and go to make up that 10 cents?

A. All the items commencing with "actual replacements 2.12" and ending with "reserve, 3 cents."

Q. That will be 12.35 cents?

A. In this case, yes, sir.

Q. That would consume the 10 cents and 2.35 over?

A. Yes, sir, in this case.

Q. And this 4.62 cents for "repairs and renewals," is a difference, if I understand it, between the actual repairs and renewals for the year 1905, and the average of the repairs and renewals for the five years of 1895 to 1899?

A. Yes, that is true, but it has taken into consideration the repairs made by other companies on their own plants of the gas sold to us—the proportionate repairs to their works, based on the amount furnished to us under the agency agreements. In other words, we are comparing a time when the Consolidated Gas Company did all its own work, so we must take into consideration some of the repairs on the plants of the other companies, which amounts to .35 cents per thousand.

Q. With the exception of that .35 cents it is an amount to equalize the repairs and replacements for the year 1905 with the
1762 average of the repairs and replacements for the five years of 1894 to 1899?

A. 1895 to 1899, yes, sir. My figures are 12.31 and 7.34, making a total of 4.97 less .35 for the other companies, making up the figure of 4.62 cents.

Q. Did the figures which you gave as the estimate of the cost of the Astoria plant include any interest during construction?

A. No, sir.

Q. Will you state generally what the ten cents in Exhibit 94 was intended to cover; that is, the ten cents which was added at the end of exhibit to the cost of operation?

Mr. PAGE: Referred to as contingent expenses including renewals.

Mr. MATHEWSON: It is on page 380-B of the Exhibit Book.

A. Covering any minor extensions, renewals on account of extraordinary wear and tear, depreciation not covered by repairs, all supersession, accidents of larger moment than usual, fluctuations in business, changes in the cost of material, and electrolysis and other contingencies.

Q. Is there serious danger from explosion?

A. There is in the modern situation, in the construction of subways. To-day there is an entirely new element in the gas business introduced on account of it.

Q. By reason of the accumulation of gas or possible accumulation in the subways?

A. Well, during the temporary work of construction of course the presence of electricity in the street adds an additional hazard. We have explosions sometimes now from accumulations of gas, from stray currents, which we were not exposed to heretofore.

Q. Are you obliged to maintain any additional inspection by reason of the subways?

A. Yes.

Q. What?

A. Well, take the case of the subway, we have one or two men

now riding on the trains all the time. We have during con-
1763 struction a great many inspectors. Another element particularly at this time is the laying of the salt water pipes. That is involving an expense of about $500 a week at the present time.

Q. How does that impose an expense on you, the laying of the salt water mains by the city?

A. The city have the right of way and order us to remove our pipes and we have to move them. In this particular system it is particularly important that they should have an easy curve. It is a very high pressure system and it is necessary even more than in ordinary water construction to have no sharp turns in the pipes.

Q. You refer to the salt water system as a high pressure system, do you?

A. Yes.

Q. Are you familiar with the real estate, meaning the land owned by the company?

A. Yes, sir.

Q. Is there any of that land, which with due regard to the conduct of the gas business of the company now and in the reasonable future, you would consider might be disposed of?

Mr. PAGE: Objected to.

Mr. BURR: Also objected to as purely speculative.

The MASTER: I think he may give his opinion about it from an expert's standpoint.

Mr. Page and Mr. Burr except.

A. In general, no, considering no removal of the plant from Astoria. There are specific places where I think some specific pieces could be disposed of.

Q. Such as what?

A. Well, there are one or two pieces; there is one in particular at 18th Street which I think could be disposed of.

Q. What block is it?

A. It is that block between 16th and 17th Street and between 19th Avenue and the marginal street.

1764 Q. Well, that is land which was occupied by the 18th Street plant, is it not, which plant was condemned by the city?

A. It was a portion of that plant.

Q. And the present ability to dispose of it rises from the appropriation of the rest of the plant by the city?

A. Yes, sir.

Mr. PAGE: Will you see if you can have that identified by block and lot number? You have it on that map, haven't you?

Mr. MATHEWSON: Block No. 688, Lot No. 21.

Q. Some parcels have been mentioned, such as the south side of 65th Street, three lots, where plans for a valve house have already been filed. Would it be prudent, having regard for the business of the company, to dispose of that?

A. No, that was purchased within two years, I think, for the purpose of erecting that house. That is on the West side.

Q. Yes; and it has been testified that the East side of Avenue A, corner 60th Street, is intended for a valve house. Would the same apply to that?

A. Yes. That was not purchased within the last two years, but the same principle applies to it.

Q. Is it possible, in your experience, to wait until the moment that you desire to erect a holder to acquire the property or land for that purpose?

A. It would be very unwise to do so; you would have to pay a very high price for your property.

Q. And wherever property is not at present, or any fraction of the property, is not at present actually covered by manufacturing plan-s or holders do I understand that the income therefrom is credited by you in the statement that you have presented to-day, to reduce the cost of gas or offset that, in the miscellaneous income?

A. It shows in the net.

Q. In ascertaining what remains for distribution as divi-
1765 dends?

A. Yes, but not the cost of gas; it does not appear there. It only appears in the net.

Q. Have you ever had any experience with gas companies where competition arose, where there were contests or gas wars, so-called?

A. Yes.

Q. Much or little?

A. I think much.

Q. What concessions in your experience are necessary by a competing company in order to draw business from the established company?

Mr. PAGE: How is that material to this case?

Mr. MATHEWSON: It is material in this way. Among other things we have alleged that we have a good will and an established business, that it has a value and a large value, and the extent of reduction in the price of gas which it is necessary for a competing company to make in order to procure that from us to draw it away from us is a very valuable element in determining the value of the good will and established business. That is recognized by the court as an asset upon which we are entitled to count.

Mr. PAGE: I do not know of any court that has recognized it as an asset.

Mr. MATHEWSON: We do.

Mr. PAGE: And I do not see how it is material or relevant here as to what some other companies that are engaged in competition may do, where they have not against their charters monopolized the business, as you have here.

Mr. MATHEWSON: I do not know what you are talking about, when you say against their charters.

Mr. PAGE: Or by reason of the fact that they have obtained a monopoly, they are entitled to charge the public more by the very fact that they have become a monopoly against the statutes of the State.

1766 Mr. MATHEWSON: That is another case, and we are not a monopoly; and the courts have expressly held it in a similar case.

Mr. BURR: I think it is irrelevant unless the condition of the companies to which he refers is shown to be exactly the condition of this company in the city of New York, so far as its rights in the streets are concerned.

The MASTER: I do not regard it as evidence of very great value, but I will take it for what it is worth and give you gentlemen an exception.

Exception taken by Mr. Page and Mr. Burr.

A. I think a minimum of 10 per cent. of the selling price existing.

By Mr. PAGE:

Q. 10 per cent. of the selling price of what, the plant?
A. Of the selling price of gas to private consumers.
Q. Would that apply also to the public lighting?
A. Yes. But it does apply to the public lighting to a degree perhaps larger than 10 per cent.

By Mr. MATHEWSON:

Q. Is it your experience that where consumers have connections and established relations with a gas company, it requires some special incentive to compel them to change?
A. Yes, sir.
Q. And the incentive you have mentioned is the 10 cents, is it?
A. 10 per cent., not 10 cents.

Cross-examination by Mr. BURR:

Q. Is the land that you use for the purpose of manufacturing gas any more valuable to-day for that purpose than it was in 1884?
A. I do not know.
1767 Q. Can you make a better quality of gas on that land to-day than you could in 1884?
A. I think not, whatever the gas was—the same gas.
Q. You cannot make any more gas than you could in 1884 on that land?
A. I think they do make more gas.
Q. That is by the addition of more apparatus?
A. Yes, sir.

By Mr. MATHEWSON:

Q. And by using water gas apparatus in some instances instead of coal gas?
A. Yes.

By Mr. BURR:

Q. What are your duties, exactly, with the Consolidated Gas Company?
A. I am vice-president of the Consolidated Gas Company, sir.
Q. And your duties as vice-president of that company are what?

A. Well, the duties which devolve upon me in the absence of the president, or that come before me from time to time.

Q. Is Mr. Bradley under your supervision or control?

A. Yes, sir.

Q. Mr. Simpson?

A. Yes, sir.

Q. Mr. Carter?

A. Yes, sir.

Q. Repairs and replacements to the plant are submitted to you first?

A. No, sir, replacements are submitted. They have to be submitted to the Board of Directors.

Q. And in addition to your duties as vice-president you also have duties as engineer of the company?

A. No, not at all.

Q. Then you do not control the action of Mr. Bradley, the chief engineer of the company.

A. I could do so, I presume; I do not control him.

Q. Well, in whatever is contemplated or done in regard to
1768 the plants of the company, do you take the initiative or does he?

A. Well, it would be very apt to be done under his initiative primarily.

Q. He would make a recommendation and you would pass upon that recommendation?

A. No, I would not pass upon it except so far as I would advise with him, but the trustees would pass upon it.

Q. You mean the trustees or the executive committee?

A. The executive committee or the trustees; either one or the other; both sometimes.

Q. Now, your first connection with the Consolidated Gas Company in an official capacity was when?

A. If I remember correctly, on the 1st of March, 1903.

Q. And where had you been employed before that?

A. In Boston.

Q. As supervising engineer of the gas companies there?

A. I was chief engineer of the Boston group at that time.

Q. Did you become vice-president at once of the Consolidated Gas Company?

A. Yes, sir.

Q. And while you have been vice-president of the Consolidated Gas Company have you been acting as consulting engineer for the Boston companies?

A. I did for a period.

Q. For what period?

A. Something over a year after I left Boston.

Q. And I understood you to say that at the time of your advent into the Consolidated Gas Company, the plan regarding Astoria and the plant there was already under way?

A. The plants were all made and some of the work was under way, yes, sir.

Q. You had nothing to do with the selection of that location?

A. Nothing whatever.

Q. Did you have anything to do with the planning of the plant there?

A. No, except as stated this morning. I was asked to go
1769 over the plant and if I could make any suggestions they would be very glad to have them.

Q. Did you approve of what was being done at that time, or did you object to any portion of what was contemplated at that time?

A. I made one or two suggestions that were carried out.

Q. You did not know of course the reason, of your own knowledge, I mean, for the removal to Astoria?

A. No, sir.

Q. So that when you testified before the Gas Commisison that the reason for the construction of the plant at Astoria was because the city demanded it, that was mere hearsay on your part?

A. Well, it was my impression that I had of the situation, and from what I know from time to time after I arrived there.

Q. You do not know as a matter of fact that the city has made such demand upon the Consolidated Gas Company do you?

A. No, sir, I do not; of course I know the city favored it, but I do not know about a demand.

Q. In what way did the city favor it?

A. In conference with Mayor Low; they seemed very desirous of furthering the Astoria improvement, but that was not in the nature of a demand.

Q. At that time that you refer to, was it contemplated that the Astoria plant should be supplemental to the plant here or instead of the plant here?

A. The first unit would be supplemental, and the additional units would be built and take the place of all the manufacturing plants in the Borough of Manhattan that belonged to the Consolidated Gas Company. That was my understanding.

Q. Was it your understanding that all the plants were to be removed from the Borough of Manhattan in course of time?

A. The Consolidated Gas Company only; not the holder stations.

Q. Didn't you testify before the Gas Commission that some
1770 of the smaller holders were to be removed?

A. They were to be removed in the natural course of events and be replaced by still larger ones; but the volume of capacity would be increased on the Island, not decreased. I do not know whether I so testified, but I say so now.

Q. Have you a statement of the maximum capacity of each of the subsidiary companies?

A. I have such a memorandum; I do not know whether it is absolutely up-to-date.

Mr. MATHEWSON: Mr. Bradley, you know, gave all that.

Mr. BURR: He summarized it?

Mr. MATHEWSON: No, he gave it in detail for each one.

Mr. BURR: If you cannot find it, never mind.

A. I have it now. The Standard I have as eleven millions, the Central Union, seven million five hundred thousand. If I remember

correctly, however, that is not all available; that is to say, some of it is coal gas and some of it is water gas, but I do not think they can make the full capacity of both at the same time.

Mr. MATHEWSON: I think that was corrected to five million five hundred thousand, which made a difference between Mr. Bradley's first total and his revised total.

A. (Continuing:) The New Amsterdam, thirty millions, the Mutual I have as eighteen million. I am not sure about that figure. I think I have covered them all.

Q. To what date is that compiliation of the capacity of the subsidiary companies?

A. It is some time during 1905. I do not know the date I made it.

1771 Q. That makes a total capacity of sixty-six million five hundred thousand?

A. That is what I have it.

By Mr. MATHEWSON:

Q. Does that include the Central Union, seven million five hundred thousand?

A. Yes, that would have to be deducted. I do not remember that figure of the Central Union. It has a water gas capacity of four million and a coal gas capacity of three million and a half, but they cannot handle both of those gases. It should be some intermediate figure.

By Mr. BURR:

Q. When you became vice-president of the Consolidated Gas Company, did you make an inspection of the plants of the Consolidated Gas Company?

A. Yes, I think I inspected all of the Consolidated Gas Company's plants.

Q. And did you inspect the plants of the subsidiary companies?

A. Well, I cannot say that I inspected them. I visited all the plants except the Mutual. I do not think I have ever visited the Mutual since I have been there.

Q. That was in 1903?

A. Yes, sir.

Q. Did you find all the plants of the Consolidated Gas Company in operation at that time when you made the inspection in 1903?

A. I am not sure about 18th Street; I think I saw them all in operation, but I won't be positive about 18th Street.

Q. Was 111th Street in operation?

A. As a manufacturing plant?

Q. Yes.

A. No.

Q. How many coal gas plants did you find in operation in 1903?

A. 14th Street and 42nd Street certainly, and probably 18th Street.

Q. How many water gas plants?

A. 21st Street, 99th Street and 44th Street.

1772 Q. I understood you to say that you arranged for the purchase of the oil for the company?

A. The last contract, yes.

Q. Who arranged for the purchase of the oil prior to the last contract?

A. I think the president did, Mr. Gawtry.

Q. Do you know how long the company had been purchasing oil from the Standard Oil Company?

A. No, sir.

Q. Did you make any effort to get oil from any other company besides the Standard Oil Company?

A. No, sir.

Q. Have you attended to the purchase of coal for the various stations of the Consolidated Gas Company?

A. In the way in which I explained this morning.

Q. By advertising?

A. No; I said one of the officers of the company obtained the figures and submitted them to me and I submitted them to the executive committee.

Q. Of course the character of the coal has a great deal to do with the character of the gas produced, has it not?

A. Yes.

Q. And have you sought to procure any special kind of coal?

A. The best for the purpose with the qualifications that it was to be deliverable in certain portions on different railroads. We do not want to buy all our coal on one railroad.

Q. Why?

A. If there is a strike on that railroad we don't get any coal.

Q. Do you keep a record of change in rates of mining and of freight?

A. I do not.

Q. But you see to it if there is any change in rates of mining and rates of freight, that if the company is entitled to a reduction because of such change, the company gets it.

A. That is considered as one of the elements of cost.

1773 Q. Who takes charge of it, you personally?

A. I do not, personally.

Mr. MATHEWSON: Mr. Carter had all that information this morning for you and waited for your examination on that point. You asked him to be prepared and he is prepared.

Mr. BURR: I think I asked this morning if Mr. Carter was ready with any of the information that I asked for.

Mr. MATHEWSON: No, statements, exhibits.

Q. What is the total capacity of the Consolidated Gas Company?

A. 51,000,000 feet, I think.

The MASTER: Has not that been answered seven or eight times by different people in one form or another?

Mr. BURR: I want to know whether this witness agrees with the other people.

The MASTER: All right.

The WITNESS: My memory is 51,000,000, exclusive of 18th Street.

Q. Before the Gas Commission you testified, did you not, regarding the capacity of the plants of the Consolidated Gas Company?

A. I think I gave the capacity and the amount of gas they had made.

Q. You testified as follows, didn't you?

"For the years 1905 and 1906, 14th Street, coal gas, 5,000,000 cubic feet; 18th Street, coal gas——

A. (Interrupting.) I think I can get the memorandum from which I testified, if you will allow me to, I had it a moment ago. I think I am ready now.

Q. Proceed, please.

A. I thought you were going to read there.

1774 Q. (Continuing:)

"18th Street, condemned by city, 3,500,000 cubic feet; 42d Street, coal gas, 4,500,000; total coal gas, 13,000,000 cubic feet. Net, deducting, 18th Street, 9,500,000 cubic feet.

Carbureted water gas, 21st Street station, 24,000,000; 44th Street station, 8,500,000; 99th Street station, 5,500,000. Total carbureted water gas, 38,000,000 cubic feet and oil gas, 21st Street 3,500,000."

A. That is correct, sir.

Q. And you further stated:

"I might say, in connection with the carbureted water gas, that the quantities given still leave a reserve in the generating capacity; that is to say, there are certain generators not running, when I give those capacities."

A. That is right.

Q. So that with those generators in operation, the capacity would be greater?

A. Yes, but water gas generators are very apt to break down and you must have some to spare for that purpose.

Mr. MATHEWSON: That makes 51,000,000 cubic feet.

The WITNESS: 54,500,000; less three million and a half for 18th Street, 51,000,000.

Q. And you testified that the maximum make of gas in these works as of October 31st, 1905, was 42,459,000?

A. That is correct; I think I gave it in detail.

Q. You further stated that that was not on any particular day, but that it was the maximum make of each particular works on various days, one is January 24, another January 4, another

1775 January 7th, February 2nd, January 5th, January 19th?

A. Correct.

Q. There is a distinction between make and output, is there not?

A. Yes, very decided.

Q. Will you explain the distinction?

A. The output may be entirely independent of the make; it would be the amount of gas that was lost in the holders plus the make, or the make less the amount of gas gained in the holders. It varies from day to day constantly.

Q. The output of gas is the total amount of gas which is made, plus or minus the difference in the quantity of gas in the holders from one morning to the next, is it not?

A. Yes, sir.

Q. You gave in detail the capacity of the various stations as of the dates named before the Gas Commission, didn't you?

A. The amount of gas made.

Q. The amount of gas made?

A. Yes, sir. I think I gave those in detail.

Q. Have you those details with you now?

A. Yes, sir. You have mentioned the dates already.

Q. Yes, but I mean the amounts?

A. Yes, sir, I have them.

Q. Give them?

A. 14th Street, 4,994,000, January 24th. 21st Street, water gas 17,997,000. Oil gas 598,000. 42nd Street, 4,658,000. 44th Street, 8,897,000. 99th Street, 5,315,000. Does that agree with the evidence?

Q. Look at the printed record of the Gas Commission and see if that refreshes your recollection as to those amounts?

A. I notice some places I give the maximum capacity and follow it with the actual make, so there are two figures appearing here.

The MASTER: Exactly what is the point here? I am afraid you are going to get our record in some confusion, the way this
1776 goes in. Can't you put that in in a block, or have you already put it in, or what is the idea?

Mr. BURR: I want to get a statement from this gentleman of the details of the capacity at all the various plants.

The MASTER: Why cumber the record with these references to his testimony in the previous proceedings? Why not let him use it for purposes of refreshing his recollection, if you like, and go on and put it in as a clean matter in our record.

The WITNESS: I might say the figures are identical to those I have just read.

Q. The maximum make of gas in these works in one day was 42,459,000 cubic feet, isn't that correct?

A. No, sir.

Q. How much was it?

A. I have not given the maximum make on the same day. The sum of all the maximum makes on the various days was 42,459,000, the figure you gave, but as these maximum makes did not happen on the same day it would not be the maximum make of those works for a day.

Q. Can you say what stations you intend to abandon and what stations you intend to retain in the Borough of Manhattan?

A. No, sir.

Q. Can you state whether you intend to abandon the coal gas plants or the water gas plants?

A. I think with 80 cent gas we cannot abandon anything, in consideration of 80 cent gas. You will have to separate your question.

Q. I am asking now with regard to the construction of the plant at Astoria. Do you intend to abandon the coal gas plants here when that first unit is completed?

A. I cannot say Mr. Burr, that we intend to abandon anything under the conditions which exist to-day in New York.

1777 Q. Will the company retain, after the completion of the Astoria plant, any of its present manufacturing plants?

A. I cannot answer the question Mr. Burr.

Q. Didn't you answer that question before the Gas Commission by saying, "The idea of Astoria was to replace all the manufacturing plants in Manhattan."

A. Yes.

Q. And you were asked this question, "That is a determined and fixed policy?" and you answered, "That is the policy of the company." Is that so?

A. I think that was correct.

Q. When did you cease to manufacture gas at the 18th Street station?

A. I don't recall that Mr. Burr. I have stated by looking at memoranda, but I cannot recall now whether it was 1903 or not. I have made a distinct statement in regard to that but I cannot recall it. My recollection is that there was no gas manufactured there in 1904, but I would not be sure of it.

Q. There is nothing but coal gas proposed for Astoria at the present time, is there?

A. Nothing, sir. I would say that the question of candle power, of course, will probably have some bearing on the subject.

Q. Do you know what the dimensions of the tunnel are that it is proposed to run from the Astoria plant to the Borough of Manhattan?

A. Something like 24 feet inside diameter, if I remember correctly.

Q. 28 feet, isn't it?

A. I think it is 28 feet outside, but I think it is 24 feet inside.

Q. How much below the surface is it proposed to lay that tunnel?

A. Some 200 or 250 feet.

Q. And how long is that tunnel to be?

A. I think something between 7,000 and 8,000 feet.

1778 Q. In addition to that tunnel you have a tunnel from Ravenswood through Blackwell's Island 10 feet in diameter, haven't you?

A. The New Amsterdam Company has.

Q. Will there be any loss to the Consolidated Gas Company by the removal to Astoria?

A. If they should move all their plants?

Q. Yes.

A. Yes.

Q. How much?

A. $10,400,000 for the plant, assuming 20 per cent. salvage, in the water gas apparatus.

Q. There is no preparation being made for water gas plants at all in Astoria, is there?

A. Not so far, no sir.

Q. Do you know any reason, Mr. Addicks, for the construction of the plant at Astoria other than this reason which has been given by Mr. Bradley, of the difficulty with the city authorities?

Mr. MATHEWSON: That has nothing to do with the first unit, you know, Mr. Burr.

Mr. BURR: Pardon me, Mr. Mathewson.

A. I think it is very essential to look to the future and care for the present of the Consolidated Gas Company, and that would necessitate another plant.

Q. That is what I want stated a little more definitely. Is it for the purpose of looking to the future that the plant is being constructed to satisfy the requirements of the future or is it because of some present agitation on the part of the city to cause your removal?

A. I think it is to care for the present, looking forward to the future, in a large comprehensive way in coming years.

Q. You do not mean to intimate in the slightest degree, do you, that there is any coercion on the part of the city which causes this transplanting to Astoria?

A. Well, I think it would be indirect rather than direct. When you cut a street through the middle of the works and take off
1779 all your water front, it seems to me it is coercion on the part of the city to make you do something else. When you cut streets through and interfere with the manufacture, of course it may be indirect, but nevertheless it is very effective. We have also had trouble even in the past year with the smoke ordinance, and threatened with arrest, &c., for making smoke in the manufacture of coal gas, which we could not avoid.

Q. Was it because you were committing a nuisance?

A. No, I do not consider a gas works a nuisance. There is always smoke in a gas works and you cannot prevent it. It is absolutely impossible.

Q. Then you consider the ideal location for a gas works is where it cannot hurt anybody by reason of smoke and smell?

A. I think the tendency of modern times is to get all gas works out of the centre of population everywhere.

Q. So that these three considerations entered into the removal to Astoria——

A. Well, I am merely expressing my point of view as I see the situation.

Q. Before the Gas Commission you were asked: "Will you state the causes of the removal to Astoria so far as you know of the generating plant in Manhattan?" To which you answered: "The primary purpose of removing was the demand on the part of the city that the works should be discontinued. There has been in the past serious agitation in regard to it and constant complaints on the part of the Board of Health and others; and the fact of the works being a nuisance. Of course, I said the other day as an engineer that I did

not concede that a gas works is a nuisance in the sense of being prejudicial to public health. But there is constant complaint of the works from various sources." Did you so testify?

A. I think so, yes, sir.

Q. And you had no knowledge of any positive act on the
1780 part of the city to compel these plants to be removed?

A. I had knowledge of objection to the works. I think there was a suit in connection with 14th Street, the smoke and dirt, by the Willard-Parker Hospital. I think that is one of the things I had in mind.

Q. Does it still remain true that the primary cause for the removal of these plants is the demand on the part of the city that the works should be discontinued?

A. I think in the sense in which I have testified to-day. I cannot add or take from anything I have said. I think.

Q. Do you know of any public official, or authority or municipal authority in the City of New York who has ever made such a demand?

A. I don't say in the shape of a written demand. I don't remember anything of the kind. There may have been before my time. As I said, Mayor Low was certainly very desirous of having the gas works out of the city and so expressed himself.

Q. This plant at Astoria is located in the Borough of Queens, isn't it?

A. Yes, sir.

Q. And it is possible for you to light up the Borough of Queens from that location, isn't it?

A. Yes.

Q. In your opinion, is the sale of gas going to increase in the Borough of Manhattan?

A. I think it will, yes, sir.

Q. Have you arrived at that conclusion from the consideration of past circumstances?

A. In a general way, consideration of the gas business and being familiar with the gas business.

Q. Does the consumption of gas keep a certain ratio or proportion with the increase in the number of people?

A. I cannot say that altogether.

Q. Do you believe that the consumption of gas in the Borough of Manhattan has reached the point of saturation?

A. You would have to qualify that and say what the point of saturation is.

Q. What do you figure out is the per capita consumption
1781 of gas in the Borough of Manhattan to-day?

A. I think I made some figures about that, if I can turn to them at the moment. (Referring to papers.) I cannot turn to them at the moment. I will say from memory it is nine thousand and some hundred feet, I have forgotten the exact figures.

Q. Over nine thousand, isn't it?

A. Over nine thousand.

Mr. PAGE: 9,400, was it not?

The WITNESS: I have it somewhere.
Mr. MATHEWSON: Per capita, not per consumer.
Mr. PAGE: I was speaking from recollection.
Mr. MATHEWSON: Yes, it is over nine thousand.
The WITNESS: I do not see it here at the moment.
Q. Well, you are familiar with all the great gas plants of the United States, are you not, Mr. Addicks?
A. Well, I have been in a great many.
Q. Outside of the city of New York, where are the largest plants located in this country?
A. I should say the larger cities by population would indicate it; Chicago and St. Louis, and New York and Boston and other large cities.
Q. And Philadelphia?
A. And Philadelphia.
Q. Have you ever had occasion to ascertain the per capita consumption in the city of London?
A. Well, I have been told what it is; I don't know that I actually made the figures myself.
Q. What I want to arrive at is this; is it not a fact that the consumption per capita is larger in the city of New York than any other city in the world?
A. I believe it to be; anything within my knowledge.
1782 Mr. MATHEWSON: I think London is about 7,500 cubic feet per capita.
The WITNESS: I would like to say, Mr. Burr, if you do not understand it, that that includes all the gas in Manhattan Island, that figure which you gave, all the companies——
Mr. PAGE: On page 1672 of the record it was given I think by Humphreys as 9,200 feet in New York and 8,000 to 8,500 in London.
Q. Do you agree with the statement of Prof. Humphreys before the Gas Commission as follows:
"In considering the question of increase in sales a good many points have to be considered, and certainly what I should call the point of saturation has to be considered. To-day, if my information is correct, and I believe it is, New York is selling more per capita than any other city in the world. It is selling nearly 9,200 feet annually per capita, a little less than that, about 9,150 feet, I think it is. London is selling somewhere between 8,000 and 8,500 feet."
A. I understand that to be correct, and I think Mr. Humphreys is very careful in his statements and always investigates a question before he makes a statement, and I should take that to be correct.
Q. What do you call the point of saturation, Mr. Addicks?
A. Well, what I would understand by the point of saturation, referring to the population, is that the amount, dividing the total sales of gas in any year by the population of the city, would be a maximum figure; in other words, that in future years you cannot expect to exceed that number of feet for each man, woman and child in the city.
1783 Q. Well, do you agree with the definition and conclusion on that point of Prof. Humphreys before the Gas Commis-

sion, when he was asked, "What do you call the point of saturation?" And he answered "To give you a physical conception of it, you know the atmosphere can absorb so much moisture for a given temperature. If that temperature drops, the moisture drops also and I think if the conditions change here, that some of the gas is going to be dropped also. The conditions are such now, we will say the electric light, and so on, that we cannot safely depend upon estimates made in the past as to what our increases will be in the future, and certainly we cannot expect to go on at the same percentages, despite the fact that we have already arrived in New York at a figure never surpassed in the world's history, 9,000 to 9,200 feet per capita. The people are consuming about as much per capita as they will be likely ever to consume." Do you agree with that statement and conclusion of Professor Humphreys?

A. I do not care to include all the simile, because I did not follow all parts of it, but I do think that the tendency of the time is such that we have about reached the maximum amount of gas used for each person in New York City. If that is the conclusion of all you have read, I agree with it.

Q. Then you agree with the statement in which he concludes "that the people are consuming about as much per capita as they will be likely ever to consume?"

A. I think it is very probable, taking conditions as we see them existing to-day in the Island of Manhattan.

Q. What do you assume the increase will be, if any, in 1907 over 1906?

A. I have assumed one per cent.

Q. And you also assumed 3 per cent. annual increase compounded thereafter until 1910, didn't you?

A. Yes.

1784 Q. And you obtain by that method a total output of 15,099,815,000 cubic feet?

A. Yes, sir.

Mr. MATHEWSON: When?

The WITNESS: In 1910.

Q. Now you base that calculation upon the Board of Health census of 1905 for Manhattan, of 2,117,375 population?

A. I do not recall how I based that particular calculation. I gave a number of figures on the increase of gas based on population, also based on the amount of gas used per meter. I had two or three figures, if I remember correctly, and I assumed a 3 per cent. increase, which gave this 15,099,815,000.

Q. Will you look at the printed record of your testimony before the Gas Commission as it appears on page 1567 and see whether that refreshes your recollection, and whether you can now state the method by which you arrived at the computation stated as affecting the year 1910?

A. Yes. This 15,099,815,000 cubic feet was one estimate. I want to say that this does not refresh my mind in reference to any typographical errors. I stated that the population in 1905 was 2,117,000, according to the Board of Health, and to check that I ascertained

the State census, June, 1905, 2,112,000, and I noticed that the greatest increase in population was 55,468 in any one year——

Mr. MATHEWSON: I do not think you need to continue that. Mr. Burr has not asked for anything further.

The WITNESS: I took the sales per capita of the Consolidated Gas Company—not of all the companies—of 6,274 cubic feet and arrived at another figure.

Q. That was the figure which you gave for 1905?

A. No.

1785 Q. 6,274 feet as the per capita sales of the Consolidated Gas Company?

A. Apparently. I see I assumed 6,300.

Q. And you gave the Consolidated Gas Company sales per capita for 1903 as 6,358 cubic feet?

A. Yes, and 1905 had fallen off slightly and I multiplied that and obtained the figure 15,166,462,000 as the output for 1910.

Q. And you gave the figures for 1900 of the Consolidated Gas Company's sales per capita at 5,340 cubic feet?

A. Apparently, yes.

Q. Can you state the number of meters in proportion in the Borough of Manhattan to the population furnished by the Consolidated Gas Company?

A. I have such figures. I will try to find them, and that will save time Mr. Burr.

Mr. MATHEWSON: The number of meters is in evidence and cannot your accountants divide the population?

Mr. BURR: I will ask him in regard to it.

Q. Is it a fact that one meter is furnished for each 5.4 persons?

A. I cannot recall that amount now; that sounds familiar, Mr. Burr, but I cannot confirm it at the moment.

The MASTER: To what extent and in what way does this line of cross-examination tend to affect any of the direct-examination of the witness?

Mr. BURR: Well, I may be mistaken, but I understood him to give some figures here of the cost of manufacture and distribution of gas in the City of New York and Borough of Manhattan, and I think I am entitled to cross-examine him upon all the elements which go into the manufacture and distribution of gas.

1786 The MASTER: No doubt, but I wanted to see the connection, that is all, between this present line of inquiry and what he has testified to. It was not quite apparent to me.

Mr. MATHEWSON: I was on the point of objecting several times, but I didn't like to, on the ground that it is not cross-examination. The testimony to which the witness's attention has been called in the printed record was testimony on rebuttal on our part after that subject had been treated upon by the complainant before the Gas Commission, and this examination has no relation to our direct evidence presented here.

Mr. BURR: I may be all wrong, but I think I am here to meet a contention on the part of the counsel for the Consolidated Gas Com-

pany, supported by this witness, that the rate fixed by the Legislature is confiscatory.

Mr. MATHEWSON: That is another proposition.

Mr. BURR: And if there is any information which this gentleman has in regard to that particular subject, I am entitled to know it.

The MASTER: Nobody disputes that, Mr. Burr. The only question is as to how these matters you have been bringing out have any specific bearing on the subject. I have got to pass on it some day, and it might facilitate me if you could make it clear to me what you are driving at.

Mr. MATHEWSON: It is not, too, part of his direct case, if it is material at all, where it does not touch anything we have put in?

Mr. BURR: I am furthermore entitled to examine this witness regarding evidence he gave before the Gas Commission upon
1787 which the Gas Commission made its order.

The MASTER: Similarly, there is no dispute about that. But that does not meet the point of my inquiry. I am not in the least disposed to cut off counsel in the fullest latitude of cross-examination, but for my own information I would like to see some useful purpose coming out of it.

Mr. BURR: In a word, I want to show that there is really no existing necessity for the Astoria plant, so far as present conditions obtain in the Borough of Manhattan, and that the cost of that plant should not be saddled upon those existing to-day and that if there is any reason for the construction of that plant, it should be saddled upon those who are to come after.

Mr. MATHEWSON: Is that affected by showing the increase of the output of gas or the prospective increase in the output of gas? This method of examination, instead of your putting in the testimony in your direct case, as to what you expect to be the increase, and we being allowed to put in evidence in rebuttal, is simply putting in our evidence, so to speak, in advance and putting you in in rebuttal with your witnesses, if you do not agree with them. It is putting the cart before the horse it seems to me. I submit that it does not touch upon anything upon which we have presented evidence here.

Mr. BURR: Of course it is very——

Mr. MATHEWSON: It is part of your case if it is at all.

Mr. BURR: Of course it is very agreeable to Mr. Mathewson to hand in a statement showing the remainder applicable to dividends as 6.69 after the computation made on this Exhibit or statement which has been entered upon the record, but I think I am
1788 entitled to cross-examine this witness on every item which goes to make this record upon this short paper which has been handed in.

The MASTER: As I say, I did not dispute it, but how the last few questions have any bearing on it, I do not perceive yet.

By Mr. BURR:

Q. In the statement which you gave to-day, showing the gas business in 1905 of the Consolidated Gas Company, you have an item reading "deduct fixed charges, 7.22." What fixed charges do you

refer to, and what is th amount of such fixed charges upon which you base that statement?

A. The net interest on our debentures of about twenty million dollars, less——

Q. Are those the debentures which were issued to obtain the stocks in the electric light company?

A. No, those were issued a year or two ago on account of Astoria construction. Deducting any interest we may obtain on the temporary loans, and that appears in Exhibit 94.

Q. Is that this item of $936,883.24 appearing on Exhibit 93, and the item of fixed charges, $972,423.44, appearing on Exhibit 94?

A. 7.32 is the fixed charge. $972,423.44 appearing on Exhibit 94.

Q. Have you an analysis of that charge or item of fixed charges, showing the various sums that are charged against various things making up that total of $972,423.44?

A. No.

Mr. MATHEWSON: Mr. Carter has testified on that subject, Mr. Burr, and showed what the total fixed charges were, and what he received from temporary investments and how this balance arose.

The MASTER: That is my recollection.

1789 Q. So you know nothing about fixed charges except as the total is stated here in Exhibit 94.

A. I haven't it in mind, excepting in so far as I stated what the fixed charges were.

Q. Well, you take the fixed charges as they were presented to you by Mr. Carter in this Exhibit 94?

A. Yes, sir, from the books of the company.

Q. And you could not state offhand now what that item is made up of?

A. No, not at all.

Q. But you can state generally, what the item of fixed charges represents?

A. I think so, yes, sir.

Q. Will you state?

A. What I said—it was the difference between the amount we have to pay for our debentures and the interest received from our temporary investments and loans, in a general way.

Q. The analysis of these fixed charges appears on State's Exhibit I, does it?

A. Apparently they correspond in amounts.

Q. Do you know what particular bills payable are referred to in this State's Exhibit I?

A. No, sir.

Q. But you do know that the debenture bonds and convertible debentures referred to are $20,000,000 of debentures issued within a year or so by the Consolidated Gas Company, and no more?

A. Well, there are debentures also, a few 5 per cent. debenture bonds, apparently in addition to that.

Q. Are those the 5 per cent. debenture bonds which were used in the acquisition of the stock of the Electric Light Company?

A. I don't know what that was used for. It was before my time.

Mr. MATHEWSON: Mr. Carter has explained those were debenture bonds of [illegible]8, of which something over a million are outstanding, and he explained in addition this exhibit in the greatest detail, exactly what that was.

Q. This item of .48 cents, taxes account other companies;
1790 where did you get that figure?

A. That is the amount of the taxes paid on the securities owned by the company—securities of other companies, which should not be included in the cost of gas as not being involved in our gas business.

Q. And the contingent 10 cents is the fund which was agreed upon to be charged against the cost of gas at a conference in 1905; is that the fact?

A. I don't remember when it was definitely agreed upon, I haven't got it in my mind. The matter was talked over a long time.

Q. It was not charged when you first took a position with Consolidated Gas Company?

A. No.

Q. It was not charged in 1904?

A. It was talked over, I think, in 1904.

Q. But actually charged in 1905?

A. Yes.

Q. And was that your suggestion?

A. I don't know whether it was a result of my suggestion or not. It probably was. In my judgment it was, but whether it was or not I can't remember. I discussed the matter seriously months before it was ever done.

Q. Did you make up any tabulation at that time apportioning part of that 10 cents to each of the things which entered into your conclusion on that subject?

A. No.

Q. It has been testified to that that was an arbitrary figure, arbitrarily fixed?

A. I don't consider it an arbitrary figure. I think it is a figure fixed on the question of business judgment and experience.

Q. Why do you not also deduct the item of street lamps as appears on that Exhibit 94, Mr. Addicks?

A. Why should I?

Q. Street lamps, 2.18?

A. I don't know why I should.

Q. That is the item which represents the cleaning and repairing of the street lamps?

A. Yes, sir.

Q. Shouldn't you also deduct the interest on the con-
1791 sumers' deposits which appears on Exhibit 94 as .39 cents?

A. No, sir, I don't think so.

Q. Upon what theory do you allow that to remain?

A. On the theory that we pay it out as part of the cost of gas. It is not retained in our capital, as I remember it.

Q. Shouldn't you deduct the item of repairs to gas stoves .42 cents?

A. I don't think so.

Q. Upon what theory do you allow that to remain?

A. It is a customary charge in the repair of stoves in all the experience I have had in the gas business.

Q. You have "Actual replacements, 2.12"?

A. Yes, sir.

Q. Where did you get that figure from?

A. That is the actual amount expended for replacements during that year and it is included in the 10 cents per thousand. That is to say it will be closed into the 10 cents a thousand at the end of the year with all the actual replacements.

Q. Have you got the paper from which you testified with regard to construction work at Astoria amounting to $2,528,000?

A. Yes, sir.

Q. Will you let me look at it please?

A. $2,582,000, it is. (Handing paper to Mr. Burr.)

Q. Do you agree with the statement of Mr. Mayer who testified here that the more up-to-date the construction of gas plants is the cheaper the manufacture is as a result?

A. With certain qualifications, within certain limits.

Q. What qualifications, for instance?

A. Well, I think if you would limit this to a single case you might make comparisons between that particular case, but I don't think you can say that in general, comparing one point with another point. Provided you do not introduce any complications or situations it might remain the same. I mean to say it might be an improvement with modern apparatus, but the expenses that
1792 might be involved might offset al- the saving. And again, if you have an old plant and you renew that plant on the same ground you have the original capital of the old plant plus the capital of the new plant, and it is a matter of computation as to whether there is any saving by putting in a modern plant in that location unless at the same time you have the ability to charge the old plant off to depreciation so as not to unduly increase your capital.

Q. But as a matter of fact, to your knowledge the price of gas not only in the city of New York, but in all the large cities of the United States has steadily decreased, hasn't it?

A. Yes.

Q. The manufacture of gas is a progressive art, isn't it?

A. Within certain limits.

Q. It has immensely progressed since its introduction in this country some seventy-five years ago, hasn't it?

A. Oh, yes.

Q. Well is that diminishing in the price of gas due to the improvement in apparatus and plants?

A. I think it is primarily due to the process itself, up to date. The introduction of water gas in my judgment is what has made it possible to reduce the price of gas more than any other element.

Q. Does not increased consumption have something to do with the price?

A. Within certain limits, but that is a matter of local question. In some cases it does and in some cases it does not, apparently.

Q. What do you find the case to be here?

A. I think for a series of years it has remained fairly steady. There are some economies in some directions which are offset by expenses in other directions. Given a steady manufacture and an increased business for the same plant in the way of meters and mains I should say it would be apt to decrease it, but when you have
1793 to build a large plant in order to meet that demand it would not necessarily affect the situation.

Q. Speaking of mains, when you took charge of the Consolidated did you ascertain the condition of the mains in the streets?

A. Yes, in conversation with the superintendent of mains. I had a general conversation, but I did not dig up any in the streets to ascertain their conditon.

Q. Have you ever made any personal examination of any of the mains?

A. Only as I see excavations, I generally look to see what is in the hole, and I very frequently see mains in that way.

Q. Did you ever see the mains that Mr. Simpson thought he detected some evidence of electrolysis in?

A. No, I didn't see that.

Q. Did you ever see a map showing the mains of the constituent companies in 1884?

A. No. I may have seen it, Mr. Burr, but it is not in my mind.

Q. Have you ever kept track of the abandoned mains?

A. No.

Q. Do you know of any person who has any information upon the question of abandoned mains, abandoned by the Consolidated Gas Company?

A. Only so far as Mr. Simpson has testified. I cannot add to that.

Q. Is there a map showing the mains and their sizes in every street in the City of New York?

A. Yes, sir, I believe there is. When I say map, I mean a map in a general sense, I do not mean it in the singular sense.

Mr. BURR: Well, it is singular we have never been able to see it; that is the only singularity I have observed.

Q. Now, this item of $300,000 for dwellings for the company's employees at Astoria? Does that contemplate the erection
1794 of hospitals and schools and kindergartens?

A. That has not crossed my mind yet. I have not gotten as far as that up to date. I have only considered the housing of the men to get them to the works. It is a matter which is pressing on us now and has been brought up a number of times in the last two months.

Q. Is there in your mind any pressing necessity for the construction of dwellings for the company's employees, requiring the expenditure of $300,000, having in mind the fact that the first unit is only now constructed?

A. I have not given that sufficient, careful thought as to the exact

number of employees and the price per dwelling or the price per unit of housing them, so I would not like to testify specifically on that. There is a pressing demand definitely for some construction for our future employees under present conditions, in the vicinity of our works.

Q. That is, at some time in the future?

A. It is pressing now.

Q. You may erect model dwelling houses for your employees?

A. I don't know about model dwelling houses, but certainly if we do anything we will make them as perfect as we can afford to make them to keep up to the times, to give them accommodations such as other people would give.

Q. Well, no plans have been drawn for these buildings?

A. No, the plans have not been drawn.

Q. It is a hope and an aspiration?

A. No, it is more than that, it is a necessity.

Q. What do you mean by the rope hauling system?

A. I explained I did not recall directly in my direct-examination by Mr. Mathewson. I will have to plead a certain amount of ignorance upon that point. It has escaped my memory. It is not a large item.

Q. How much would you deduct from this summary of
1795 data in the amount of $2,582,000, as being wholly and entirely unnecessary to be taken into consideration at the present time?

A. I would not deduct any of it from that point of view, not wholly unnecessary, but I should say specifically that I hope there will be no by-product plant built, that is $300,000, I hope we won't have to spend $300,000 for the dwellings of our employees. The fifteen million foot holder I am afraid will be a necessity; it will be a matter of reasonable precaution, in running the works to have a second holder.

Q. Have you adopted that plan of a second holder in the Borough of Manhattan?

A. I don't think there is any station that has not more than one or two holders, I do not recall any.

Q. Well, I mean to say is it a duplication of the holders by reason of the possible necessity for the extra holders used in the Borough of Manhattan?

A. Why, undoubtedly. I don't know what was in the mind of the engineer, but there cannot be a question in my mind that that was in the mind of the engineer.

The scows and tugs for transferring coke, $500,000. That system is an absolute necessity. You have got to get the coke over to New York and handle it in a modern way.

Q. Does that mean the wiping out of the National Coke & Coal Company?

A. Not at all. The National Coke & Coal Company will do all this work and it will necessitate their spending a large sum of money for horses and carts in addition. If the gas company handled it, the gas company would have to expend money for carts and horses and stable room.

Q. You mean it will require further advances on the part of the Consolidated Gas Company to that company?

A. For construction, yes. If they are going to do it they have got to have more money to do it with. And you cannot do it out of the present facilities.

1796 Q. This by-product plant is something new, isn't it?

A. It is for ammonia and tar.

Q. The idea I suppose is to extract every possible pound or gallon of ammonia and tar in the process of making gas at Astoria?

A. The idea is to extract every particle of the ammonia, I mean the apparatus in the works extracts every article of ammonia it can from the gas, and then that is in the shape of ammoniacal liquor of varying strengths and from that sulphate of ammonia is made. We sell it as ammoniacal liquor on the basis of a certain price per pound of sulphate. As far as the tar is concerned the object is to make as little tar as possible and then get as large a price for it as we can.

Q. The idea for this new plant would be to utilize the utmost out of your residuals?

A. Oh, yes. As a matter of fact, the larger amount of residuals you have for sale the less the tendency is to pay the price, a reasonable price, for those residuals.

Q. That would have a tendency to reduce the cost of gas, wouldn't it?

A. Certainly. The more for residuals you get the more it reduces the cost of gas.

Q. And those would enable you to do the work the company now has contracts with the Barrett Company and other companies to do?

A. Well, that would enable us to turn it into a raw product, which then would have to be placed on the market, and that the Barrett people do at the present time, but after we have turned it into the raw product we have got to sell it.

Q. Will you explain a little more in detail the difference between oil Baume 28 degrees and oil Baume 34 degrees?

A. Simply one has more lighter products, volatile products in it, than the other.

Q. And what specific purpose is the lesser degree of oil used for in preference to the greater degree?

1797 A. Never used in preference. The higher gravity of oil we can get the better we like it, within certain limits; it is a question of price.

Q. And you take 28 degree oil because you cannot get 34?

A. Well, it is the cheapest and as long as we can handle it with the fewer number of gallons to reach the consumer with the given candle power we prefer to use the cheapest grade.

Q. Are you familiar with prices paid for oil in the large cities of the State of New York?

A. I examined the returns from Brown's directory, but I don't know their accuracy.

Q. What is Brown's directory?

A. It is a directory of all the gas companies in the country, with information as to their officers as well.

Q. It is a recognized trade publication is it?

A. Yes; published by the publisher of *Progressive Age* in New York city; a capable man.

Q. And is *Progressive Age* a progressive gas paper? Is it devoted entirely to the interests and the information of those interested in gas works?

A. It has a great many articles on gas in it.

Q. Now you say you sought to obtain a low price for this oil. Can you state any person that you had any dealings with for that purpose other than the Standard Oil Company?

A. No, sir; I cannot.

Q. You are acquainted with Mr. Mayer, who testified here?

A. Yes, sir.

Q. Is he now in the employ of the Consolidated Gas Company?

A. Yes, sir; for the specific purpose involved in this hearing.

Q. I ask you is he now. His labors are finished, I understand?

A. Yes, sir; entirely.

Q. And Bartlett, Hayward & Company are building the first unit at Astoria of the plant there?

A. No, sir; they are building a certain part.

Q. When you said that in your efforts to get a favorable
1798 contract for your oil, that the chief engineer advised you he needed a better grade of oil, did you refer to Mr. Bradley?

A. I did.

Q. Did he say what he needed a better grade of oil for?

A. Yes, on account of candle power, maintaining candle power.

Q. Did he say why the oil previously used was inferior for his purposes?

A. On account of maintaining candle power, yes.

Q. What was the oil that you had been using prior?

A. 28 degrees gravity, or thereabouts.

Q. And not 34?

A. Not 34. When I say that I say that practically there was some 34 used, but a very small quantity.

Q. Well, how small?

A. I do not recall the exact number of thousand gallons.

Q. Would you say million gallons?

A. Or million gallons, either.

Q. Was this your first venture into the oil regions?

A. Will you put that question a little plainer.

Q. Had you ever bought oil for any gas company before?

A. I do not think I ever made a contract *ebfore* that contract.

Q. Were you familiar with the prices charged in other cities for oil?

A. I have been familiar with the prices in the cities in which I was employed, in Boston.

Q. What grade of oil do they use there?

A. I was trying to recall. 34 gravity, I think—32 or 34, as near as I can remember. They did use naphtha in the past years and they have used as high as 44 gravity in the past years.

Q. You did not buy any oil in Boston, as I understood you?

A. I don't think I ever made a contract, no, sir.

Q. Do you know what the prevailing rate for oil of this degree, 34, is in Boston to-day?

A. No, sir.

1799 Q. Now, do you know what the prevailing rate to-day is for 28 degree Beaume?

A. No, sir.

Q. Are the companies in Boston coal or water gas plants?

A. The Consolidated Gas Company of Boston is both coal and water gas, the New England Gas and Coke Company is entirely coal gas.

Q. You testified at an investigation into the workings of those companies a little while ago, did you not?

A. Yes, I did.

Q. Your estimate of the cost of gas as given by you, is based upon all the items embraced in Exhibit No. 94, I understood you to say?

A. Everything on that paper is not on Exhibit No. 94, because it has reference to some of the repairs and renewals in previous years, but the basic figures are obtained from Exhibit No. 94.

Q. And the figure that you give in this statement which has been spread upon the record, 69.36 cents, is in your estimation the cost of gas per thousand cubic feet at the burners?

A. That is the price that should be allowed as the cost of gas in 1905 at the burners, based on sales.

Q. If I understand this paper rightly, you claim that the profit which is derived by the company from that figure would be what?

A. Are you figuring on 80 cent gas or dollar gas?

Q. I am figuring on 80 cent gas.

A. Well, the gross amount applicable to dividends would be 6.69; fixed charges, 7.32.

Q. Well, do you mean that this being the cost of a thousand cubic feet of gas at 80 cents, it leaves a remainder applicable to dividends upon the capitalization of the company of 6.69?

A. After paying the fixed charges on the debentures.

Q. After paying all the fixed charges?

A. Yes, sir.

Q. 6.69 cents per thousand cubic feet?

A. Yes.

1800 Q. You have not been able to figure out in anyway, from your examination of the business of this company or the figures that have been produced here, that an 80 cent rate forces you to manufacture gas without any profit whatever, have you?

A. No, sir.

Mr. MATHEWSON: We would shrink from such an effort.

Mr. BURR: You may be retiring.

Mr. MATHEWSON: Not yet.

Q. Your attention was called to the pressure clause of the law, and I understood you to say that it was not possible to comply with the terms of the provision of the law in that regard?

A. I said my judgment was that it would be practically impossible to comply with the provisions of the law.

Q. Have you ever tried to comply with them?

A. Yes, sir.

Q. You have had a great deal of experience, I presume, in regard to pressure?

A. Yes, I think I have.

Q. In any other city than Boston?

A. No, I never ran a works except in Boston.

Q. Is it true that the greater the pressure the greater the consumption of gas?

A. No, I cannot say yes to that statement.

Q. Then you disagree with Mr. Bradley?

A. I do not know whether Mr. Bradley testified to that or not, but I cannot say as a law that the greater the pressure the greater the consumption of gas, because I do not think it would need necessarily follow.

Q. What relation has the size of the mains to the pressure of gas?

A. I cannot answer that question intelligently. I am not quibbling, Mr. Burr, but I am just thinking of an answer.

Q. In your judgment has it any relation? That is the
1801 point I am trying to get at. Has the size of the mains used in distributing gas, any relation to the pressure of the gas? It may be a simple question to answer and it may be extremely difficult; I do not know?

A. The best way I can answer that is that the size of the main is an element in the distribution of gas to which pressure has some relation. I do not think I can answer any better than that.

Q. As far as the amount of gas is concerned, for instance, you can send a greater amount of gas through a large main than you can through a smaller one.

A. Yes, under the same pressure.

Q. So therefore it has some relation to the pressure?

A. I did not say that it did not have any relation, but I thought I would qualify that one element.

Q. Is it possible to construe the law limiting the pressure of gas at from one to two and a half inches at sea level, by the usual scientific method, and add a half inch to this pressure for each one hundred feet rise?

Mr. MATHEWSON: I suggest that that is not a proper question. Whether it is possible to construe that is a matter perhaps of law rather than expert testimony. If there is any doubt about what it means, it is not for this witness to say.

Mr. BURR: I am asking him if that is not the usual scientific way of construing that law.

Mr. MATHEWSON: No, I do not think you asked him that.

The MASTER: Ask him anything you please about putting gas through pipes, but I do not see how he can be asked as a gas man as to any valid effect or construction to put upon a law.

1802 Mr. PAGE: He said he was familiar with the law, and that it was absolutely impossible to comply with the requirement of it.

The MASTER: Well, I will let him answer that question the best he can.

Q. Is it possible by limiting the pressure of gas at from 1 to 2½ inches at the sea level, by the usual scientific methods, to add a half inch to those pressures to each 100 feet rise, and comply with the requirements of the law in question?

The MASTER: That is all right.

Mr. MATHEWSON: I object to that again, as a conclusion.

The MASTER: I will let him answer it.

Mr. MATHEWSON: It is assuming that if he violates the law, will it be possible to comply with the law. That is virtually the question.

The MASTER: He may answer it.

Exception taken by Mr. Mathewson.

A. I cannot answer that question.

Q. Do you give it up?

A. No, I do not give it up by any manner of means. I would not give it up, but I cannot answer the question offhand on the stand.

Q. You mean to say that you would require some time to consider that?

A. My answer would naturally be no, that it was not possible to comply with the law even with that qualification; but I would not say that offhand on the stand. I would be very glad to consider the matter. As far as I am concerned I do not construe the law and never have, except as it appears on the face of it. For instance it says "at no place" and "no mains"—as a matter of fact, a service main. Now, we have not any such term as "service main" 1803 in the gas business. That is the first place where the law is very uncertain, but it says that in no service mains shall the pressure be less than 1 inch and more than 1½ inches at any distance from the works. Now, what "at any distance" means, I do not know whether it means a foot or some indefinite distance.

Mr. BURR: Well, the court will take care of that Mr. Addicks, because the law will be construed as a reasonable law, no doubt.

Mr. MATHEWSON: I wish it could be. Merely for information, did your question contemplate the result if the pressure specified by law should be taken as applying to sea level, and as being increased half an inch above the pressure specified by law for each additional elevation which you mentioned? Is that it?

Mr. BURR: Standing apart from the law, I have asked him the direct question.

The WITNESS: If there were 2½ inches pressure at the sea level, the East River at some point, and at 100 feet above that, it was, for pure coal gas, one inch more? Does it mean that we can carry, if that difference is one inch, does it mean that we can carry 3½ inches at that point, and 100 feet above that point 4½ inches, and 100 feet above that 5½ inches. That is the only thing I mean. I am speaking now of pure coal gas, where about 100 feet is one inch pressure. Unenriched coal gas as you get a higher gravity, it runs down.

Mr. PAGE: The question was about a half-inch.

The WITNESS: Take a half inch then; two and a half inches at sea level, three inches at 100 feet, three and a half inches for the next hundred feet and four inches at the next hundred feet
1804 and so on. If that is the proposition I do not see how it can be within one and two and a half inches at any distance from the works. I should be very glad to construe it that way, and it would certainly make the law easier if it could be construed that way. Whether it would be effective or not I would not like to say offhand.

Q. What was this average that you referred to in making up your computation of 10.89 for replacement?

A. The average replacement, 1895 to 1899, was 12.31. There is an exhibit in this case, I do not recall the number; and for the calendar year of 1905 it amounted to 7.34.

Q. You said something with regard to the average for the past twenty years.

A. No, I did not take that. Others have taken twenty years in those computations.

Q. You gave here a figure of 10.89.

A. I think that was about the figure for twenty years. Others have taken the whole twenty years. If we were manufacturing gas for the whole twenty years and not buying gas, I would be content to take that time, but as we were buying gas for some of that period, as for myself, I prefer to take the time we were manufacturing all our gas and compare it with that.

Q. You say you are familiar with the real estate of the company?

A. Yes, sir, I think I am perfectly familiar with it.

Q. Can you tell me where the company has vacant land not in use for gas manufacturing purposes?

A. I could call your attention to any plots and show you the use to which they are put.

Q. Have you made any diagrams showing the use that every parcel of property or real estate or land is put to by the Consolidated Gas Company?

A. I do not recall doing that.

Q. Is there such a diagram in existence? I mean showing
1805 at each particular plant where each particular building is located in that particular plot?

A. I cannot answer that yes or no.

Q. I call our attention to Exhibit 105 before the Gas Commission which was introduced in evidence here yesterday, which purported to be a statement of gas made for the Consolidated Gas Company by other companies, net, for the nominal year ending October 31, 1905. That statement shows month by month for the nominal year ending October 31st, 1905, the sales by each company to the Consolidated Gas Company with the price charged, which includes the ten per cent. addition to actual cost. I call your attention to the differences not only in the cost of the several companies, but the same companies for the several months of the year. For instance, the New Amsterdam, month of greatest cost is July, 39.66; month of least cost, December, 31.85. Standard, July, month of greatest

cost, 35.31 month of least cost, May, 31.65. For the Mutual, month of greatest cost January, 41.60, month of least cost, October, 34.91. Central Union, greatest cost 34.43, October, month of least cost, June, 25.85. The increased percentage over lowest cost in the case of each company is as follows: New Amsterdam, 24 per cent., Standard 11½ per cent., Mutual, 19 per cent., Central Union 33 per cent.

Now, can you give any explanation as to the cause for variation between the prices of those companies?

A. No, except that in general, the price month by month is an uncertain thing. It not only depends upon the cost of labor and material, but it also depends on the amount of repairs to the plant. That has a bearing on the cost.

Q. The season of the year does not seem to be a factor, because one of the companies has its highest cost in the month of January, two others in the month of July, and the fourth in the month of October; while the least cost to one company is in the month
1806 of December, one other in the month of June, and still another, the month of October?

A. Of course you would have to have definitely the sales of that particular time in each company. As I said before, the quantity of repairs has a very great bearing. Of course normally if you had no repairs whatever and maintained the work in a normal way, year by year, with coal gas particularly, you would expect the highest cost in the summer, or higher cost in summer than you would in winter, normally. With water gas it is not so noticeable, ordinarily, except for the repairs, because the total labor is not a very large item. It would have to be that the increase of sales or output of the works would offset the increased cost in winter, and it might be that repairs were delayed, material might not have been received in summer; it might have been delayed until November or December. I cannot tell without considering each company.

Q. Can you give any explanation of the fact appearing on this exhibit that the Consolidated Gas Company buys three times as much from the Mutual Company as it does from the Central Union, although the cost to the former company is 30 per cent. greater than the latter, and buys five times as much from the New Amsterdam Company as it does from the Standard, although the cost is five per cent. less?

A. As far as the Central Union is concerned, it would buy no more gas than was necessary in Central Union territory. As far as the other companies are concerned, it would undoubtedly buy from the company that was able to supply it.

Mr. MATHEWSON: The Mutual does not operate in Central Union Territory, Mr. Burr, nor does any of these other companies.
1807 The WITNESS: None of them at all.

Mr. MATHEWSON: That merely relates to public lamps maintained in the Bronx. The Central Union gas is obtained for that; there is no other place to get it.

Mr. BURR: I think it is in evidence here, Mr. Mathewson, the actual sales per active meter?

Mr. MATHEWSON: Yes, that appears.

Q. Are you selling more gas this year than you did last year?

A. I am a little in doubt whether we are selling a little bit less or a little bit more. Some months I remember we have sold less. Month before last we had a material gain, evidently on account of the very dark weather we had during one month.

Q. Are you buying more gas this year than you did last year?

A. I have not got that figure in my mind.

Q. Is it not a fact that by the statements produced by your company before the Senate Investigating Committee, the cost of manufacturing gas in 1904 appeared to be 39.27 per thousand cubic feet?

A. I cannot remember that far back. It is a question of whether it is make or sales, or including that bought or made, or whatever it may be.

Q. Does it appear from Exhibit No. 94 in this case that the cost of manufacturing gas in 1904 was 32.42 cents per thousand cubic feet?

Mr. MATHEWSON: At what point, at station cost or in the holder?

Mr. BURR: Station cost.

A. That appears to be the figure at station cost, gas made, Consolidated Gas Company's own works, 32.42.

1808 Q. To what change of conditions do you attribute your ability to manufacture at over 17 per cent. less cost in 1905 as compared with 1904?

Mr. MATHEWSON: Now, just a minute. There is no evidence here that in 1904 they manufactured at 39 cents. The witness is asked a question here as to whether that was not so, and he says he cannot say, and he does not know whether if there was such a figure it was based on make, or sales, or what not. I submit that there is no foundation for the question, and I object to it.

Mr. BURR: I understood the Master to make a ruling here long ago that all the statements in the pleadings and affidavits were before you, part of it being that the answers of the City of New York is the report of the Stevens Investigating Committee. By that report it appears that in 1904 the cost of manufacturing gas was the figure I have stated.

Mr. MATHEWSON: I would like to see the report to see whether it relates to sales or what it does relate to.

The MASTER: I suppose Mr. Mathewson's point is that that does not prove it to be the fact, the fact that it was reported by the Stevens Investigating Committee.

Mr. BURR: No, but these gentlemen can deny it if that is not correct. I asked for that figure for the purposes of comparison, as is plainly to be seen.

Mr. MATHEWSON: Let us supply the first figure first.

The MASTER: You can ask him, assuming that it appears in the report of the Stevens Investigating Committee or elsewhere that they manufactured gas at a certain price in 1904, how he can

1809 account for the fact that in 1905 it apparently cost a lower price, and let him make the best explanation that he can that covers that point.

Mr. BURR: Thank you, I will adopt the suggestion.

(The remarks of the Master were repeated to the witness, after which Mr. Burr put the following revised question.)

By Mr. BURR:

Q. Assuming that it appears in the testimony before the Senate Investigating Committee that the cost of manufacturing gas in 1904 was 39.27 cents per thousand cubic feet and you knowing the fact to be as it appears by your Exhibit 94 at this hearing that the cost of manufacturing gas was 32.45 cents a thousand cubic feet in 1905, can you tell me to what changed conditions you attribute your ability to manufacture at over 17 per cent. less cost in 1905 as compared with 1904?

Mr. MATHEWSON: I object to the question as not proper.
Objection overruled; exception.

A. I could not tell without comparing item by item, Mr. Burr, as to what to attribute it to.

Q. Calling your special attention to that data and those figures, would you be kind enough to investigate it so that you may be able to answer it to-morrow?

Mr. MATHEWSON: I do not think the witness will have a chance to do that, Mr. Burr. It is a good deal of a question, involving a great many elements.

A. I would be perfectly glad to suggest things that might
1810 bear on it, and it would be a question in my mind of cost of labor and material and any increase in efficiency in the work. That is all I could see that I could look for. It varies from year to year and from time to time, so that is the reason I figured on 10 cents.

Q. What I would like to know is whether that difference in the price was due to the increased production at a lower cost for material, labor and expenses, or in the saving of a greater percentage of the gas made, it appearing that the cost of material, labor and expenses in 1904 was $3,528,901.55 for an output of 8,984,550,000 cubic feet and the cost of the same in 1905 was $3,455,091.37 for an output of 10,657,810,000 cubic feet, as shown by Exhibit 94?

A. Is that manufactured gas or is that sold gas? These figures you have called my attention to, or the one that is here, is based on the cost of gas made, not sold.

The MASTER: When you say here, you mean what exhibit?

The WITNESS: In Complainant's Exhibit 94. Now, if there is any reference to sales in any of those figures, it would not apply to this figure referred to. So far as two works are concerned, a works that is smaller than another works may make gas cheaper than one that is larger. So that it would require analysis in each case.

Q. As a matter of fact, you made more gas in 1905 than ever before in the history of the Consolidated Gas Company, is not that so?

A. I would not like to answer that offhand, Mr. Burr. I have not those figures in my mind. I have had no occasion to use them,

therefore, I have not them in my mind. I could remember it. I could say what gas we sold in 1905, Mr. Burr. I have that figure.

1811 Q. Now, in the affidavit made by you you state that about four-fifths of the present generating capacity of the Consolidated Gas Company are in the shape of modern up-to-date water gas plants, which could not be improved upon anywhere and that the remaining one-fifth are coal gas plants which are efficient and in shape to operate for an indefinite period without impairment of efficiency?

A. Yes, sir, I think that statement is absolutely correct.

Q. And you heard Mr. Mayer testify?

A. I heard Mr. Mayer testify, yes, sir.

Q. And you agree with Mr. Bradley, the engineer, in the statement made by him in his affidavit, that all the manufacturing plants are kept at a high state of efficiency and during the past year they produced more gas and at a lower cost than ever before in the history of the company?

A. I agree with the first statement, that they have produced more gas, Mr. Bradley states, and I would accept Mr. Bradley's statement for that, that it was the largest amount of gas made.

Q. Then there is no reason to believe that the value of your manufacturing plants will depreciate so long as it is kept in its present condition of use?

A. Except for supersession.

Q. What do you mean by supersession?

A. Superseded by some other plant, and the final renewals that any plant must need. It may be—take a plant in a perfectly good condition, I cannot say that there may not something happen to that portion of the plant, the whole thing may blow up and there would be an expense of hundreds of thousands of dollars.

Q. In setting aside 10 cents per thousand cubic feet of gas sold, hasn't your company intended to provide for all necessary cost of ordinary as well as extraordinary renewals, replacements and repairs?

A. Ordinary?

1812 Q. All necessary cost of ordinary as well as extraordinary renewals, replacements and repairs.

A. That is in addition to ordinary repairs?

Q. Yes.

A. But it includes renewals but not repairs. You have to make a distinction between renewals and repairs. The current repairs are taken care of in the cost of gas, but the renewals are included in that 10 cents.

Q. That is renewals and replacements?

A. Renewals and replacements, allowing 2.12 cents in this particular case. Of course I will add, too, that if there is a variation in the cost of repairs—I have shown here in this item as between the repairs for the calendar year a difference of 4.62 cents. I should consider personally that 10 cents would cover that or would be part of that difference, and the actual replacements?

Q. Well, as a matter of fact, there will not be any actual depreciation in the value of your plant until it is dismantled or removed to Astoria, or a portion of it sold for scrap?

A. Not necessarily, it may be superseded at any time, I cannot say when. I don't know what will develop in the gas business to cause supersession.

Q. Have you in mind any supersession other than that contemplated by the removal of the plant to Astoria?

A. No, none that would be probably installed in that same place; in other words, the cost of installation plus the original cost would be greater than would pay to make the change.

At 5:10 adjourned to 11 o'clock Friday, September 7th, 1906.

Last Exhibits:

Complainant's 224.
State's U.
City's 44.

1813 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, FRIDAY, *September 7th*, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Burr, Mr. Page, Mr. Gans, Mr. Kirby.

1814 WALTER R. ADDICKS, being further examined, testified as follows:

Cross-examination by Mr. BURR (continued):

The WITNESS: I would like to make a correction in my testimony yesterday.

Q. What page of the record?

A. I do not recall the page. It was a question about electrolysis that you asked me.

By Mr. MATHEWSON:

Q. He asked you if you had seen the mains which Mr. Simpson testified as having pitted with electrolysis.

A. Yes, the question covers the general question of electrolysis,

not specific in any case. I had in mind the case of some electrolysis that occurred about Spring Street, I think it was. As a matter of fact, there was a case of electrolysis about the Brooklyn Bridge, which he also testified to. A sample of that part was taken up and submitted to me, and I had forgotten it at the moment. In accordance with that, I called upon the Brooklyn Railway people to investigate that question in connection with electrolysis at the Brooklyn Bridge, after I saw that piece of pipe; I did not recall it at the time.

The MASTER: Page 1793 is the page on which occurs the statement which the witness corrects.

A. Further, regarding capacity, I stated that the Standard was eleven millions. I understand that it is rated at ten millions, instead of eleven millions, although it has made an excess of ten millions. As regards the Mutual, I said that I had never been in
1815 the Mutual works since I have been in New York in connection with the Consolidated Gas Company. Mr. Bradley has given the capacity as twelve millions, and I will have to take his figures as regards capacity, for I merely learned it from him. I also gave the Central Union 7,500,000 feet. That was correct. Mr. Bradley originally gave it as 9,000,000, and that is the sum of the capacity of water and coal gas, but 7,500,000 is all that it can handle through the works in its entirety.

Q. What would that make your total for the capacity of the other companies in Manhattan, including the Central Union?

A. Taking 30,000,000 for the New Amsterdam, 12,000,000 for the Mutual, 10,000,000 for the Standard, 7,500,000 for the Central Union—59,500,000.

By the way, I omitted entirely the Northern Union. There is half a million capacity there.

By Mr. PAGE:

Q. But they do not manufacture?

A. They do not manufacture. On capacity the total makes 59,500,000.

By Mr. MATHEWSON:

Q. Exclusive of the Northern Union?

A. Exclusive of the Northern Union.

By Mr. PAGE:

Q. Then you have the Equitable plant lying idle; can you figure that up?

A. That is another plant that I do not remember going into. The plant was shut down.

By Mr. MATHEWSON:

Q. That is not a plant that could be operated to manufacture gas with any economy, the old Equitable plant, is it?

1816 A. It is a retort process, of using oil in retorts, and except for enriching coal gas, we are not using that process to-day. We are using the cupola generator types.

By Mr. BURR:

Q. So that you have not included the Equitable in that calculation?

A. No, sir.

Q. Can you state now what the capacity of the Equitable is?

A. No, sir.

Q. So that to the total which you have given now must be added the capacity of the Equitable?

A. The Equitable has been shut down for so many years that I do not know what condition it is in to manufacture. It might be on a par in some respects with 111th Street, but I do not know.

Mr. MATHEWSON: The testimony in the New Amsterdam case before the Gas Commission was that it was dismantled and wholly unfit for use.

By Mr. BURR:

Q. Now, is it not a fact that there is nothing to prevent you to-day, or next month, or in the current at any time, from disposing of your holdings in the Edison Electric Light Company?

Mr. MATHEWSON: I object to that as immaterial and irrelevant.

The MASTER: How is it, Mr. Burr?

Mr. BURR: I want to show that the situation is just about the same with the Edison Company as it is with the Astoria Light, Heat & Power Company. They own all of the stock of each company. Now, certainly there is nothing to prevent—and I want to get it on the record by an officer of the company—there is nothing to

1817 prevent the Consolidated Gas Company from disposing of its holdings in the Edison Company, in which it owns all the stock, and there is nothing to prevent it from disposing to-morrow, or the day after final judgment in this case, of all its holdings in the Astoria Light, Heat & Power Company.

Mr. MATHEWSON: It does not own all the stock of the Electric Light Company, but I do not think that makes it material or immaterial.

Mr. BURR: In my view of this case—if your Honor would like my view—it is just as absurd to the cost of gas the construction of a plant in Astoria as it would be to charge the erection of a new electric light plant by the Edison Company against the cost of gas supplied and sold by the Consolidated Gas Company. That is the reason I want to get this fact on the record from an officer of the company, if he can say, that there is nothing to prevent his company from selling out to-morrow all its holdings in the Edison Company, nor is there anything to prevent them from selling out to-morrow all their holdings in the Astoria Light, Heat & Power Company.

The MASTER: Did anybody ever claim that there was?

Mr. BURR: I do not know; I want to know whether the company claims that there is any reason why they cannot.

The MASTER: He can answer it, if it is of any value.
Exception taken by Mr. Mathewson.

A. I do not think the officers would have any power to dispose of their plant, or their stock in any company.

Q. In the Edison Company?

A. No, I do not think the officers have that power.

1818 Q. Then your understanding is that the Consolidated Gas Company as a company has no power to dispose of the stock that it holds in the Edison Electric Light Company?

A. I do not think the officers would have that power; the stockholders might.

Q. In speaking of the officers, I speak of the company.

A. If you speak of the stockholders, I presume the stockholders have power to handle their property as they wish within the law. I do not know what the law is in the matter.

Q. Do you know why the Consolidated Gas Company did not construct these plants at Astoria itself?

A. No, I cannot say definitely why it did not. I do not know that they had any right to do it directly.

Q. Do you know if there is anything to prevent the Consolidated Gas Company from disposing of its holdings in the Astoria Light, Heat & Power Company?

A. I think my former answer would apply to that as well as to the Edison Company.

Q. I now ask you if there is anything that you know of to prevent the Consolidated Gas Company from disposing of its holdings in the Astoria Light, Heat & Power Company?

A. The officers of the company I do not think could do it; I think the stockholders would have to do it.

Q. In making up this statement which has been presented here, net for the calendar year, 69.36 per thousand feet of gas, did you take into consideration the increased cost, or the so-claimed increased cost, by reason of the additional candle power provided for by the law in question here in this case?

A. Yes, I have taken that into consideration.

Q. And what do you claim is the increase that has been necessary in the case of a thousand cubic feet of gas by reason of that extra two candle power? In other words, by reason of your compliance with the law?

A. 1.83 cents per thousand.

1819 Q. Can you give us the method by which you arrived, or the computation by which you arrived at that figure?

A. Yes. I figure that the additional oil would have amounted to .14 cents a gallon for the full candle power for the entire year.

Q. Is that for two candle power or one?

A. That is for meeting the law; and I figure that the new price of oil under the new contract would be 4.52, while in the calender year it was 4.23 cents per gallon, which made a difference of .294. The total oil that would have been used therefore is 4.07, multiplied by .294 is 1.2 cents per gallon. The .14 at the average price of 4.73 was 59 cents, making a total of 1.79 cents per thousand, this being on the amount of gas made. Based on the sales, 1.79 becomes 1.83.

Q. Were the figures you have just given, from the paper which you read, prepared by you or were they prepared for the purpose by Mr. Carter?

A. No, those were prepared by me from the figures which were prepared by Mr. Carter.

Q. When you say .14 you refer to the two candles and not to one candle, do you not?

A. No, that is the additional amount of oil that would be required, from our figures.

Q. An increase from 20 to 22 candle power?

A. To cover the entire law for the entire year.

Q. By reason of the addition of the extra two candle power?

A. Yes, that is right.

Q. For six months of this year you had 20 candle power and for the other six months you had 22, and the average was 21 candles?

A. The average would have been 21 candles; that is, figuring it that way. But I did not do it by candle power, I did it by the quantity of oil used. I could not do it by candle power; it is a question of the amount of oil used for six months in order to meet the requirements of a 20 candle power law and for the other six months
1820 to meet the requirements of a 22 candle power law.

Q. Would the reports from stations of the Consolidated Gas Company for the months which have elapsed since the first of January and up to the present time show the increase if any caused by the extra 2 candle power?

A. I am not personally familiar with those reports. I do not think I have seen them more than once or twice in connection with this hearing, but they would show the quantities used, whatever they might be.

Q. Can you state, Mr. Addicks, what is the actual oil required for one candle power, in gallons?

A. Coal or water, Mr. Burr?

Q. Coal.

A. Coal gas?

Q. Yes.

A. I cannot recall distinctly. If I remember rightly, when naphtha was used it was half to three-quarters of a gallon to raise it from the normal gas which comes from the retorts to about 19 candles. I do not recall what it is for gas oil. They are different.

Q. Can you state it any more definitely with regard to water gas?

A. No, I usually state about 5 gallons for 25 candle power; it is a rough figure. The exact amount for a candle power I think would vary, depending upon what candle power the gas was from which you started.

By Mr. PAGE:

Q. Coal or water gas?

A. I am speaking of water gas now.

Q. The same would be true of coal gas?

A. Yes, I think if you start with 12 candle power or 15 candle power gas.

1821 By Mr. BURR:

Q. Before the State Gas Commission you were asked:

"Q. Have you made a computation so that you can say how much per thousand feet in your best judgment the additional cost will be, due to the additional use of oil?"

A. Yes, sir.

"Q. Will you state how much it is? A. 2.62 per thousand."

A. That is correct, sir.

Q. And you were asked this question:

"Q. What price of oil is that based on? A. Based on an increase in the price of oil of 6 per cent. and the use of 34 gravity oil during the six months, which would amount to about 40 per cent. of the oil used, 60 per cent. being the lower grade."

A. Yes, sir, I think that is correct.

Q. You were asked a further question:

"Q. Is that what you estimate as the increased cost due to the increase in candle power? A. The increased candle power is about one and one-half a gallon; the increased cost of oil is about the same, out of that 2.62."

A. I do not recall those exact figures as to the 2.62.

Q. Mr. Addicks, is it not a fact that the real maximum output of the Consolidated Gas Company is around the Christmas holidays?

A. Not necessarily. It may be anywhere from the first of November to the first of February, and I have known of maximum
1822 outputs being, if I remember correctly, in November. Not of the Consolidated Gas Company, but I say in some companies. It depends upon the combination of a very dark day and very cold weather or suddenly clearing up cold the following morning.

Q. Is not that an exceptional situation?

A. I don't think so. In old days it used to be about the 24th of December, it was the largest day of the year, but it is not true now; more frequently the seventh or eighth of January in my experience in gas companies. In reading some of the maximum makes, the other day, that indicates to some extent the variety of time. But as I said the make does not mean the maximum amount in the holders because we might lose some on the maximum in the holders.

Q. Could you without any great difficulty procure and present a statement showing the maximum output, say two days before last Christmas, of all these companies?

A. I could give it to you for the Consolidated Gas Company, perhaps, quite readily.

Q. It would not require much trouble?

A. I could give it to you for the Consolidated Gas Company very readily.

Q. I would like to have that.

A. The output of the 23d and 24th of December?

Q. Yes.

A. All right, sir. It just now occurs to me, Mr. Burr, that there might be a good deal of difficulty in that, as the amount of gas made under the agency agreements is based on the calculations of unaccounted-for gas of the other companies on the whole month; I don't

know about the exact accuracy of the output of the Consolidated Gas Company for any particular day.

Q. Well, I will take it as accurately as you can procure it?

A. I will do that.

Q. And with any qualification that you desire to attach to it.

A. All right, I will do the best I can.

Q. In addition to that information you will be able to pro-
1823 duce the average output for the year, will you?

Mr. MATHEWSON: The average daily output? We have given the daily output per year, and if you will divide it by 365 you will get the average output. We ought not to be asked to do that. We might make a mistake.

Q. Well, will you give us what you claim is the average daily output of the Consolidated Gas Company?

A. I don't claim any average daily output. It has no meaning to me. I would never use it and could not see any occasion for using it.

Q. In the affidavit which you submitted in this case, Mr. Addicks, you give the daily capacity of the first unit at Astoria as 20,000,000 cubic feet. Now, is that the extreme actual limit?

A. That is the designed capacity of the works.

Q. How many retorts are there?

A. I don't remember, Mr. Burr?

Q. Do you know the size of the retorts?

A. No, I could not recall it from memory.

Q. Can you state what charge of bituminous coal is used per retort and how many distillations for each charge?

A. No, sir.

Q. Is a 15,000,000 cubic foot holder included in each unit?

A. There will be a 15,000,000 foot holder in the unit, and there is a 15,000,000 foot holder included in this particular unit and a tank for a second unit.

Q. Have you got the contract for the construction of the Astoria plant?

A. No, sir.

Q. Or the preliminary estimates of the engineer or engineers as to the cost of its construction?

A. No, sir.

Mr. BURR: That, I believe, has already been called for.

1824 Mr. GANS: Yes, I believe they are to be produced.

The WITNESS: I would say, Mr. Burr, right there, I have an estimate which I testified from before the Gas Commission. I have that estimate, but I don't know that it is a preliminary estimate. It is the one in which I testified about $13,096,000 as the value. I have that here with me, if you wish to look at it.

Q. Let us have it.

Mr. MATHEWSON: We have given the items of $13,134,000, and the difference between that and $13,096,000 only relates to slight additions.

The WITNESS: I can tell you now practically the additions. There was cement to the amount of some eighty or ninety thousand dollars,

and there were added certain bridges to carry the pipes. The pipes originally were to go under ground between the retort house and exhauster house, and in connection with the closing of Winthrop Avenue we had to allow a space for a larger sewer for the City, and found such difficulty in getting our pipes across on account of the prospective sewer of the City, as well as our own sewers, that we carried them across on bridges, which raised the cost in that particular case.

Q. The statement which you made yesterday with regard to these various items of which you gave us the figures of estimated cost, were they based upon anything definite, any engineer's estimates, other than your own?

A. These estimates were based in part on actual contracts and part on what would be required, but a portion of those estimates were based upon actual contract given out for the work, to which was added an undistributed expense of 10 per cent.

1825 Q. Can you state briefly which part is represented by contract or what items are represented by contracts?

A. In part.

Q. Yes.

A. Do you mean from memory? I cannot from memory. I can refer to the notes, and possibly I can.

Q. Well, if you cannot we will not waste any time on it. Is it not your experience, Mr. Addicks, that a reduction in the price of gas is followed by an increase in consumption?

A. Not necessarily.

Q. I have asked you what your experience is?

A. Well, there was a reduction in the price of gas in Boston that was followed by a decreased sale.

Q. For how long?

A. That was during the competition, and not only that, there was a time when the Boston Gas Company reduced the price of gas, which was immediately followed by the introductions of Welsbach burners and the rapid spread of electric light, and the introduction of water gas resulted in the falling off of the output for a number of years. That was finally overcome, and a gradual increase of business set in. But later, when the Brookline Company came in competition, the Boston Company stood still for a long time; so those were the results of the decreased price of gas, and they did not result in an increased consumption necessarily.

Q. Assume a case where there is no competition and the price of gas is reduced, what has been your experience in this regard?

A. Well, in suburban companies, where the price of gas has been reduced radically, there has been a very large increase of gas, but that is not only due to the decrease in cost, but also due to the fact of a large increase in population.

Q. Are you familiar with the situation as it existed here in the years 1899 and 1900?

A. No, I am not.

1826 Q. When your business or your plants are removed to Astoria, they become the property of the Astoria Light, Heat & Power Company, don't they?

Mr. MATHEWSON: Is that not a matter of conclusion of law, Mr. Master? I think so, and I object to it.

The MASTER: It is a matter of speculation or prophecy.

Mr. MATHEWSON: And even law.

Mr. BURR: The fact is here undenied and undisputed that they own all the stock of the Astoria Light, Heat & Power Company, but the fact is equally undisputed that they propose to construct the plants over there, so I say is it not a fact that the plants constructed there upon this plant or place or at this point, will become the property of the Astoria Light, Heat & Power Company, of which, it is true, the Consolidated Gas Company owns all the stock. I want to ask him that, and want to base another question on his reply.

Q. Is not that so?

The MASTER: Well, I don't see how it is a proper question, Mr. Burr. If you could show that it was by virtue of some agreement, or possibly a present intention, but your question is so vague. What is to prevent their changing their minds about it, if they have an intention, and doing something else with it to-morrow?

Mr. BURR: Absolutely nothing to prevent it.

The MASTER: What is the use of encumbering this record with such matters as that? Get down to facts.

Mr. MATHEWSON: And we may consolidate the two companies bodily.

The MASTER: Yes, and somebody may bring an action to
1827 dissolve them and wind them up.

Mr. BURR: I am going to ask him, is it not a fact that whatever loss the Consolidated Gas Company suffers by reason of the removal of these plants to Astoria should be charged against the Astoria Light, Heat & Power Company, and not against the consumers of the Consolidated Gas Company.

The MASTER: But is not that all a matter of argument? It involves conclusions. I do not see how the witness can testify about that with any value to anybody.

Mr. BURR: Well, of course, I call his attention to it. I thought they were ready with explanations to all these things, as they have been with regard to so many other things. If he has no explanation, and it is a matter of argument, very good; I will let it remain that way.

The MASTER: That is the way it seems to me.

Mr. BURR: It is quite clear that the removal of these plants to Astoria will be of great advantage to the Astoria Light, Heat & Power Company.

Mr. MATHEWSON: Then why prove it, if it is clear already?

Mr. BURR: I think that is all I will ask Mr. Addicks now.

The MASTER: Now, Senator Page.

Mr. MATHEWSON: You will take till one o'clock, Senator?

Senator PAGE: I presume so. Is Mr. Addicks the witness you have been stating was the witness to come on and prove the price and cost of gas?

Mr. MATHEWSON: Well, you will have his testimony.

Mr. PAGE: I want to know. You stated when we started
1828 to cross-examine Mr. Carter that you did not want us to waste any time on that because you had another witness. I want to know if this is the witness.

Mr. MATHEWSON: He is one on that subject, as his testimony shows.

Cross-examination by Mr. PAGE:

Q. You stated, Mr. Addicks, that it was impossible to comply with the pressure provision of the law of 1906?

A. Yes, sir, I stated that was my judgment.

Q. And one of the difficulties was the fact that you did not understand the meaning of some of the terms used in the act.

A. No, I did not state that that was the reason, I simply said that there were those uncertainties in connection with the act, in connection with some reply I made to Mr. Burr; at least that is my memory of it.

Q. You stated, as a gas engineer and a practical gas operator, that there was no such thing as a service main?

A. I don't know of any such term, no, sir, as described as a service main.

Q. So, in the use of that term the Legislature was inapt in its efforts to express its intentions?

A. I think so.

Q. As a part of the distributing system of a gas company there are mains of various kinds, I suppose?

A. There are mains, yes, sir.

Q. What do you call those mains scientifically; give them their scientific description?

A. We call them mains.

Q. Are they called anything else, or subdivided in any way—do you have trunk mains?

A. Some call them trunk mains, and some call them transit mains; certain mains they call transit mains, and certain mains they call trunk mains, and they call them distributing mains.

1829 Q. A trunk main would be a main that would run between the works and the holder, or between the works and some distributing district, without takeoffs for service?

A. To my mind that would describe a trunk main. I don't know that it would to all engineers, but in speaking of a trunk main that would describe it to my mind. It would be a principal supply main, leading to some district or same holder station, and might or might not have any connections taken off of it, but it would be a large main.

Q. Now, the mains that are used for distribution of gas to the consumers, what is the technical and scientific term for them?

A. Simply street mains.

Q. Street mains?

A. I know of no other term specifically.

Q. None of the mains that I have now referred to would be denominated a service main?

A. None that I would recognize.

Q. As a part of the distributing system, however, of a gas com-

pany there is in connection with its street mains what are known as service pipes, aren't there?

A. Yes, sir, or services; either service pipes or services.

Q. And that is the property of the gas company?

A. Well, usually up to the street line, and some places beyond the street line it is the property of the owners of the property.

Q. You mean up to the house line, don't you?

A. Pardon me, I do mean the house line. I don't know that that applies in New York. We put in our services, and we hold the ownership of certain pipes inside the house. I don't know legally that we have any right to control them.

Q. I think you mean you hold them to the connection with the gas meters?

A. Yes, that is right; but in some other towns that is paid
1830 for by the consumer, and therefore is, of course, the consumer's property.

Q. But in New York, I believe, the gas company owns up to the meters?

A. Yes, they put it in in that sense.

Q. Now, these service pipes, which are called by gas engineers services, are of various sizes, are they not?

A. Yes.

Q. The provision in regard to regulation of pressure would be most important with reference to the consumer, wouldn't it?

A. Yes, although it does refer also, you remember, in connection with the city, it refers, I think, to the street lights as well.

Q. Are there these services running to the street lights?

A. Yes.

Q. The regulation of pressure was for the purpose of giving an equal flow of gas to the consumer at what was presumed to be a reasonable pressure, wasn't it?

A. I think you could probably testify better than I could on that, Senator. I assume that that was the purpose.

Q. You know the legislators never know what their intention is until the courts have told them afterwards what they did intend.

A. I could only assume that it is, although I have no doubt that was the idea.

Q. Now, will you state why it is impossible to maintain a pressure within the range of one and one-half inches at the meter of the consumer?

A. At the meter of the consumer?

Q. Yes, which is the end of the service pipe.

A. Variations in the demand of the consumer; variations in the atmospheric conditions; variations in the level; the complications under which the distribution system of a great city is involved; as to space in streets, subways, and the multiplicity of elements that we
meet in the practical distribution of gas; all combined make
1831 it impossible in my judgment to comply with that law.

Q. Now, we will take up, first, your variation because of atmosphere. How much of a variation would that allow for, and how rapid would be the change in variation?

A. The change might be instantaneous, and might reach as much as seven-tenths of one inch pressure.

Q. What change in the condition of the atmosphere to which you now refer could cause an instantaneous change of pressure of 0.7 inch?

A. A sudden storm.

Q. What kind of a storm?

A. I would not like to characterize it as a cyclonic storm or what particular kind of storm it is.

Q. In your experience have you ever had such changes?

A. I think we had one within six months, the one I have in mind.

Q. When was that?

A. Within six months there was a storm where the variation of pressure was marked on the sheet I believe at a maximum of 0.7 inch.

Q. Where was that indicated?

A. On the registering pressure gauges.

Q. At the works?

A. No, we have quite a number. I don't know how many of the registering gauges indicated it. It is not unknown heretofore.

Q. Then you referred to the difference in elevation?

A. Yes, sir.

Q. What variation do you figure for that?

A. That depends somewhat upon the quality of the gas that is being distributed.

Q. Well, we will assume the quality of gas that the law requires you to deliver and that you manufacture for delivery in the City of New York?

A. Well, from memory that is somewhere in the vicinity of half an inch pressure. I don't remember the exact number of hundreds.

1832 Q. You say half inch pressure. What do you mean by that?

A. Why, for 100 foot rise.

Q. That is the rule for coal gas unenriched, isn't it?

A. No, it is one inch for coal gas unenriched. Every 10 feet practically of coal gas unenriched represents 0.1 inch pressure. Now it depends upon what the quality of the gas is, the proportion of water gas and coal gas, as to what exact amount of difference there is in pressure for each 100 feet. It is a variable quantity.

Q. Well, taking air as 1., coal gas is about 0.6, isn't it, and water gas about .52?

A. Well, taking—I hesitate to testify to this from memory; I like to testify exactly; but taking air as 1,000, coal gas unenriched would be somewhere about 420 or 450, carbureted water gas, plain and simple, would be somewhere in excess of 600, probably 650; pure naphtha gas would be in excess of one thousand. Now you may have a variation from——

Q. Pure water gas would be heavier than air?

A. No. 650 in relation to 1,000.

Q. You said in excess of 1,000, didn't you?

A. No, I said oil gas would be heavier than air.

Q. That would be a gas of very high candle power?

A. Yes, sir. It would probably be in excess of 50 or 60, possibly 70 candle power.

Q. There is a certain amount of friction in the delivery of gas through pipes, isn't there?

A. Yes, sir.

Q. In making this computation you allow for the direct rise of gas, do you not? I mean perpendicular rise, when you say that the pressure would increase by half?

A. Yes. You take a pipe and put it up at the top of this building, for instance, and for each one hundred feet of height you would observe a difference of pressure, which would be indicated on a pressure gauge.

1833 Q. If this pipe though was laid at a very oblique angle, so that in getting the rise of 100 feet you would pass it through a long length of pipe, the increase of pressure would not be nearly as great, would it, because it would be overcome somewhat by the friction?

A. Well, you are assuming two different things in that case, Senator. If you take a pipe that has gas in it under pressure running to the top of this house or running the distance from here to Harlem, given the same elevation, I would not expect to find any difference in those pressures until the point when you commenced to take gas off the main; the moment you take gas off the main then the question of the difference in pressure would appear and that would vary entirely with the length of main and the quantity of gas taken out.

Q. And that would tend to very materially reduce the pressure?

A. If you could govern——

Q. (Interrupting.) Given a pipe of main that is running for a considerable distance and at regular intervals of varying services from which gas is being drawn, the pressure would be reduced very materially, wouldn't it?

A. Yes, if you knew exactly what was being used you might offset one for the other.

Q. And do not gas engineers for that purpose always place their works if possible at sea level or at the lowest point of the town so as to take advantage of the increase of pressure by the rise of the mains?

A. No. My idea is more that they do that so as not to have to increase their holders and their holder pressure, in order to force it down, rather that than the other. That is, indirectly your reason might be so. If you are down at the lowest level you are getting the full value of that holder, whereas if you locate that same holder on top of the hill, you could not get any gas down at the bottom

1834 of your hill. Nobody would get any gas there at all.

Q. And likewise with a less holder pressure you could deliver gas at a greater distance by having a slight rise?

A. That is true, sir.

Q. With the exception of the northern end of Manhattan Island is not the topography of the City of New York ideal for gas delivery purposes?

A. No, I do not think it is ideal at all, Senator.

Q. As far as the altitude is concerned, if you have a steady rise to the centre and have your works situated at the water front?

A. There are certain parts of Manhattan Island that considering distribution, with the holders or works on each side, that present no difficulty.

Q. The section that has been referred to by Mr. Bradley is practically the section north of 110th Street to Spuyten Duyvil, from Morningside and Edgecombe Avenues over to the river?

A. I don't recall.

Q. Where the altitude is testified to be from 107 to 250 feet higher than the water?

A. I don't remember Mr. Bradley's testimony in detail, but I do know from personal knowledge that around the vicinity of Fort George and between there and 80th Street there is a very great difference in the altitude. I do not recognize the streets that you refer to.

Q. Well, there are sections of the city where the altitude is much higher than the other sections. Is it not possible to regulate the pressure by carrying a trunk main and establishing a distributing system and placing a district governor at the outlet of the trunk main?

A. We do at the present time run trunk mains to the various parts of the city, but we do not have the district governor.

Q. No, I know you don't, but isn't it done by gas engineers very frequently?

1835 A. I know of one case where they have a high pressure main. The city of St. Louis has a high pressure main and they have some district governors. It is a comparatively new installation, but they do not carry as low as two and one-half inch pressure.

Q. How about Detroit?

A. I am not familiar with Detroit.

Q. Do you know whether they have district governors in Chicago?

A. I don't know whether they have district governors or not. They probably have station governors.

Q. Do you know anything about Kansas City?

A. Oh, pardon me. That is a high pressure suburban distribution system in Chicago, but that is a surburban matter where fifteen or twenty pounds pressure may be carried on a main; that is not applicable to city use.

Q. Is that handled through district governors?

A. Yes, but that is not applicable to city use, the high pressure. That suburban pressure method is used in sparsely settled territories to quite a considerable extent throughout the United States.

Q. Don't you know that abroad, and in very many cities of this country, district governors are employed for the purpose of regulating the pressure?

A. I know there are places where district governors are employed in this country, the cases I have already stated. I have never been abroad, so I have not much knowledge except from reading.

Q. Well, I mean from your reading and study of these questions as an engineer in charge of one of the largest companies in the world?

A. I know district governors are used.

Q. And it is possible with a district governor to carry in the trunk main almost any pressure and deliver it to the distributing system at a very much reduced pressure, or a uniform pressure?

A. Not without the loss of candle power.

1836 Q. But it is possible—just leave out the candle power and everything else and confine yourself to the possibilities of delivering gas at a very high pressure in that trunk main and regulating it by a district governor to a uniform low pressure in distributing mains.

A. There are high pressure systems and governors which distribute gas at the pressure at which it is burned.

Q. It is a well known method of handling a distributing system of gas plants, known to gas engineers and in practical operation in many places?

A. In certain places.

Q. You have automatic governors at your various stations, have you not. I mean manufacturing stations, also at your various distributing stations?

A. We have governors at our distributing stations and some of our manufacturing stations to maintain an even pressure at the outlet of the governor.

Q. You know, don't you, that in all cities where there are great differences in the altitude that district governors are employed to regulate the pressure?

A. No, sir, I do not.

Q. To what extent have you studied the question of the regulation of pressure by governors or otherwise since this law was passed?

A. I have studied the effect by placing or causing to be placed through the engineer department a multiplicity of registering gauges through Manhattan Island, endeavoring to reach the limits required by this law. I have sent throughout the United States and had pressure gauges put on various systems throughout the United States to determine whether there are any companies in the United States who are approximating this law. Among others, some of the places where this high pressure distribution that you refer to is in use.

1837 I have also examined some data in regard to governors that are used for that purpose. I don't know that that completely covers the ground, but it does to some extent.

Q. These pressure gauges that you have put on throughout the city and that you have had applied to pipes or mains of other companies as you have testified in various cities is for the purpose merely of ascertaining what the pressure is?

A. Yes. Self-registering so that you have the pressure for the whole twenty-four hours.

Q. Did you take a pressure at widely distributed points at the same time?

A. Yes, sir, they are distributed all over Manhattan Island from the Battery to the end of Manhattan Island.

Q. And to what particular mains or pipes were they applied?

A. There are applied in various places; some inside; I guess nearly

all of them from some services either in one of our properties or in some other building.

One of your questions suggests another point. Before we could get the gauges and put them in service, we had some three or four hundred men who took pressures every fifteen minutes, that is when the law was first passed, so you could, if you wanted, get quickly a bird's eye-view of what the situation was, by the use of these several hundred men to take the pressure; and we took pressures off street lamps throughout the whole city; if not simultaneously, we would take the pressure at 8.15, then at 8.30, and then at 8.45 and so on, but that was all supplemented by automatic registering gauges in order to determine the pressure.

Q. Now, as a practical problem, the most important thing to the consumer is that the gas should be delivered at a uniform pressure, or nearly uniform?

A. If it were possible, Senator, for a gas company to give a uniform pressure to every consumer at all times it would be an
1838 ideal condition and a very desirable condition, but it is not possible to do it.

Q. I presume you have preserved these charts, have you?

A. Yes, sir.

Q. Could you produce the chart, say for one simultaneous test, or such number of tests as would fairly show the conditions?

A. No, I could not.

Q. Why couldnt' you?

A. On account of the multiplicity of conditions throughout the whole city throughout the whole year.

Q. Well, by that I mean, you say you tried to take some uniform, that is, simultaneous tests throughout the city?

A. That was by the use of the men that I referred to on the first test. Now there are other registering gauges in service the same as the city has them in service in their testing stations. It is exactly the same thing as the city has only I think we have a great many more than the city has.

Q. Yours are at different points in the city, aren't they?

A. Well, I don't know how far apart. I think wherever we have testing stations with the city it would be the same things or very similar. It may be a question of different service and if there is any difficulty with that service or any more gas is used on one service than the other, it would show a different pressure, or might show a different pressure, not necessarily so.

Q. Have you tabulated the results obtained from these pressure tests throughout the city?

A. No, that would be an enormous undertaking.

Q. How did you then use them?

A. My observation of the way the pressure was running on each chart from time to time.

Q. Are they in any way tabulated so as to show the pressure, the variations of pressure at different parts of the city in different periods?

1839 A. I really can't say whether they are. The city has such tabulations in their testing stations.

Q. I understand then that all the use that you made of these very extensive charts that you have taken, was once in a while to look at them?

A. No, I consulted very frequently with the engineering department, the department that had charge of that, and I looked over the figures.

Q. That matter then was under the charge and direction of Mr. Bradley, wasn't it?

A. Yes; I do not have directly charge of every department of the gas company, you understand, and familiar with every detail. I am not physically able to do that.

Q. I understand that of course. You took the matter up, talked the matter over with Mr. Bradley, and he would exhibit certain of these charts to you?

A. Yes, I would ask for them, and look over the charts and run over all of them and draw my own conclusions from them, irrespective of anyone else.

Q. These charts are in Mr. Bradley's possession, or in his department, are they?

A. In his department or under his control.

Q. And if there were any tabulations made he would have them, would he?

A. Yes.

Q. You testified that you made the oil contract in November, 1905?

A. I did, yes, sir.

Q. And that the reason that was made was because you required more of the 34 degree Beaume to be delivered than, under your construction of the contract, City's Exhibit 10, it was possible for you to obtain?

A. For that reason I took the question up?

Q. Yes.

A. Substantially that.

Q. Did you inquire to find out how much oil had been delivered under the contract, City's Exhibit 10, prior to going into negotiations for the new contract?

A. For the current year I did, yes, sir.

1840 Q. You stated, I believe, that you thought it would be necessary for you to have, and therefore you provided for, 18,000,000 gallons?

A. No, sir.

Q. To be delivered within certain periods?

A. No, sir.

Q. This is the question that was asked you:

"Q. What provision? A. Why, in regard to 18,000,000 gallons.

"Q. Just state it? A. The result of that was that this paragraph was put in:

In the event of your requirements, November 1st, 1905, to March 31st, 1906, being for a greater quantity of 34 gravity oil than 18,000,000 gallons, we are to have the privilege of substituting for such excess oil of lower gravity than 34 degrees, but not lower than 28 degrees."

A. That is correct; only for that one year.

Q. Yes; then you estimated that it would be necessary for you to have the right to require the furnishing of 18,000,000 gallons between November 1st, 1905, and March 31st, 1906?

A. No, sir.

Q. For what purpose was that put in the contract?

A. I wanted all 34 degree oil, and the Standard Oil Company was in doubt as to whether they could possibly supply that, and they simply put that in as a matter for their safety. They said that they would make every effort to do it, but that they could not guarantee to deliver in excess of 18,000,000 gallons that year, because I came to them in November, and they said they could make no preparations for storage or furnishing that quantity of oil. The amount required, Senator, was much in excess of 18,000,000 gallons.

Q. For the use of the Consolidated Gas Company,

A. For the uses of the company on Manhattan Island, in-
1841 cluding the Consolidated Gas Company; or, rather, in New York, which included the Consolidated Gas Company, and also the supplies for the New Amsterdam and Standard—the Central Union.

Q. You know, do you not, or did you not inquire at the time, as to how much oil had been delivered under City Exhibit No. 10?

A. Yes, I had at that time. I do not remember at this time what the figures were, I did know at that time. I looked into that matter.

Q. You knew that there had been 82,000,000 gallons of the 28 gravity oil delivered?

A. I do not recall the exact figures now, but I did investigate the question of deliveries of the 34 gravity and the 28 gravity for the year in question.

Q. In making that investigation you probably referred to the books that were produced here by Mr. Carter?

A. I think I asked Mr. Carter for the figures, that is my memory of it; but, however, I had the figures in some way.

Q. And that there had been only 7,000,000 of the 34 gravity oil delivered under that contract?

A. Well, I would not figure it that way. There may have been the 7,000,000, but as far as the quantity is concerned I would take it on the percentage of oil delivered through the year. The difference between that and 7,000,000 would be the difference between 28 degree and 34 degree oil for the entire year.

Q. I do not know that I quite catch your meaning there.

A. Suppose there were 80,000,000 to be delivered. Twenty-five per cent. of 80,000,000 would be one-fourth of 80 which would be 20,000,000 of one gravity, and the remainder of the other gravity. The difference of course would be the other. Now, if any portion of that 25 per cent. had been delivered, the difference between that and the 25 per cent. would give what was remaining.

Q. Or to figure it in another way, you had a right to take
1842 25 per cent. of 34 degrees Beaume and 75 per cent. of 28 degrees Beaume; and if you had taken the 25 per cent. of the 82,000,000 of 28 degree Beaume, you would be entitled to one-third

of that amount in the 34 degree? That is, you would have had 27,000,000 gallons due you on that 34 degree oil?

A. The results would be—if 25 per cent. was 34 degree gravity; that would be 25,000,000 out of 100,000,000 that would be 34 gravity. Of course, if you take that proportion of that 25 per cent. what that represents with reference to the 28 gravity, that would be one-third of the 28 gravity, but it would be 25 per cent. of the whole, and 25 per cent. of the whole would be 33 per cent. of the three-fourths.

Q. If deliveries had been made currently and in the proportions of the contract you would have received 82,000,000 gallons of 28 degree Beaume, and you would have received 27,000,000 gallons of the 34 degree Beaume.

A. I do not know what the figures are, but I will put it this way. If we were to receive currently, we were to receive 25 per cent. each month of 34 gravity and 75 per cent. of the 28 gravity.

Q. Now, we find as an actual fact that you had received about 90 per cent. of 28 degree and about 10 per cent. of 34 degree?

A. In other words, when we took the oil currently we used the lower price oil to the extreme that we could use it, and therefore during those months we did not use the 25 per cent. we had the right to call for. We used the full of the lower gravity oil, which made the lowest priced gas.

Q. That would be the way that you would naturally do it; in summer time you would use the larger amount of 28 degree and in winter time a larger amount in proportion of 34 degree?

A. It depends upon your contract, and what rights you have under your contract.

Q. Irrespective of what rights you have under your contract, if you were operating with two oils——

1843 A. (Interrupting.) There was no question at that time of 22 candle-power in connection with this other contract, this question of using 28 gravity oil. The question was at that time whether in the machines we could use 28 gravity oil. We had the right to call for some 34 degree gravity, so as to make a higher gravity oil. Now, this new contarct explicitly and thoroughly covered it, so that there could be no possibility of error or mistake in the reading of the contract. I covered that very thoroughly, that we should have a right to have 34 gravity oil during the specific months, which covered the winter months and also covered either side to some extent. The remainder of the time we had to take the 28 gravity oil.

Q. But I am calling your attention to the condition that you were in at the time you made that contract, after you had been advised by counsel that the contract allowed you to call for those proportions of deliveries currently?

A. That was month by month.

Q. The practical construction of that contract would have been that you could take 82,000,000 gallons of one kind of oil and 7,000,000 gallons of another kind. That would have been a prac-

tical construction of the contract as between your company and the Standard Oil Company?

A. As I remember the contract now, we had only the option to call, or we had the right to use 28 degree entirely under that.

By Mr. MATHEWSON:

Q. Seventy-five per cent. of the total number of gallons was to be 28 degree Beaume?

A. If taken currently.

By Mr. PAGE:

1844 Q. "You are to have the privilege of requiring deliveries from us of a quantity which shall not exceed 25 per cent. of the 177,000,000 gallons of gas oil, of gravity which shall not be below 34 degrees Beaume."

A. Yes, sir.

Q. "The balance of the 177,000,000 gallons shall be of gravity not below 28 degrees Beaume, or higher at our option."

A. That is right. Those deliveries were to be made currently; if we did not take our option to take any 34 gravity we had the right to use the cheaper grade oil, 28 degrees, for the entire period that we did it, provided we could do so and obey the law.

Q. Altogether you had only taken 89,000,000 gallons, when your contract called for 177,000,000, leaving 88,000,000 to come?

A. Our contract did not require us to take any of the 34 gravity oil.

Q. It did not require you to take it; it gave you the right to demand it?

A. Yes, if taken currently.

Q. Who was the counsel that advised you as to that construction of the contract?

A. I continually confer with counsel, Shearman and Sterling.

Q. Was there any arrangement made for an adjustment of the Company's yielding to the Standard Oil Company this right that they had to take a large quantity at a lower price?

A. I do not know what you are referring to.

Q. Why, there was still about 90,000,000 gallons of oil due on the contract, City's Exhibit 10, at a price of 4.04 for 28 degree and 4.62½ cents for 34 degree, and you made a contract agreeing to pay the Standard Oil Company 4.29 for 28 degree and 4.87½ for 34 degree?

A. We went to the Standard Oil Company; the Standard Oil Company did not come to us. I was compelled to go to them in connection with getting this higher grade of oil. I could not get

1845 the higher grade oil and I had to make arrangements in order to get it. And I made those arrangements to do it.

Q. When Mr. Gawtry, your predecessor, went to the Standard Oil Company to negotiate the contract, City's Exhibit No. 10, he got an allowance of some $119,000?

A. He got an allowance of $119,000?

Q. Yes, he got a better rate on undelivered portions of the contract than the contract called for.

A. I do not know about that. What I think you are referring to is the fact that we got through that one contract and commenced to use the heavier grade oil experimentally to see if we could use it, and all that we used of the heavier grade was made at a price at which we could use it; and that amount represents the difference in price of those two oils which we actually used. They were anxious for us to stop the use of 34 gravity, as there was a great shortage of it, and then for the first time we commenced using 28 degree, and for every gallon of 28 gravity oil we used we got a lower price for it. That is my understanding of the situation. I do not understand that there was any allowance of any kind.

Q. What about the 32 gravity oil?

A. 32 gravity?

Q. Could not that be used practically as well as 34 gravity?

A. 34 gravity is what we have used successfully, the kind we wanted.

Q. What did you use in Boston?

A. All the way from 34 to 44, as I remember it.

Q. 44 is naphtha, is it not?

A. No, naphtha is 60 and 62, and 78, high gasoline averages 78.

Q. Now, as I understand your testimony as to the cost of producing gas by the Consolidated Gas Company, you have taken Complainant's Exhibit 94 and you have made certain deductions and certain additions to offset the deductions; is that it?

1846 A. No, sir, not to offset the deductions. There are certain additions which added to the figures after the deductions were made, but they were not made for the purpose of offsetting the deductions.

Q. And you offered the result of that as the cost *of* the Consolidated Gas Company of making and distributing gas?

A. I offered that as the result of what should be allowed for the cost of gas for the calendar year 1905, as I stated.

Q. If your directors should ask you to let them know the cost of making gas, would you pursue that method?

A. If my directors were to ask me for the cost of gas in order to fix a rate at which they could figure the selling price, I would submit that table.

Q. Supposing your directors should ask you what it cost you to produce and deliver gas to the burners of the company, would you take Exhibit 94 and make those deductions and present that as the result?

A. If they asked me the current year's cost, or the month's cost, I would give them a statement of the labor and material that entered into the manufacturing cost of gas at that particular time, with whatever other charges appeared on the books in the way of depreciation during that period. It depends on for what purpose the directors would ask me for the figures whether it was a current matter or something to determine the fixing of a rate as to whether they could afford to do it.

Q. There is a wonderful fluctuation in the valuations of plants, whether it is for the purposes of taxation or whether it is to enter into computation as to cost of gas. Then, the question as to what it cost you to produce gas depends on the use that is to be made of the figures, is it?

A. No, not at all; it depends on the period on which you want to undertake to consider the cost.

Q. Referring to the record before the Gas Commission, I
1847 find Exhibit 78A, to which I will call your attention, and in which there is set down with great detail a statement as to operation, which purports to be a monthly report, prepared upon a blank of the company giving the gas made, the average daily make, the total amount of coal used, gas made per ton, oil used for enricher, net make per ton, coke produced, percentage used, coke produced for sale, tar produced, coal used per hundred pounds of coke carbonized, amount of gas made per man, gas made per retort, and an infinite amount of detail. For what purpose was that report made?

A. I really do not know.

Mr. MATHEWSON: I do.

The WITNESS: I do not recognize the report at the moment.

Mr. PAGE: I am willing to concede that Brother Mathewson knows all these things.

Mr. MATHEWSON: It was made because you requested certain information made up for a certain month.

Mr. PAGE: No.

Mr. MATHEWSON: Yes.

Q. Did you ever see the reports on file in your company, of which this is a copy? Now we are getting to something which was not made up.

A. I do not recognize it.

Q. Turn to Exhibit No. 114, which relates to the operations of the water gas stations. You will see an entirely different set of details, but the same infinite detail as to the operation of a water gas plant?

A. I should say from looking at that that that was the engineer's report of the conditions existing at that plant, as to blast pressure and coalings, &c.

Q. But does not every gas company keep just exactly such records as that, to show what it costs to produce a thousand cubic
1848 feet of gas?

A. They keep records so that they can be reported to the office.

Q. To the most minute detail?

A. They keep such records to be reported to the office, showing what labor and material enters into the cost of gas, so that the cost of gas can be calculated.

Q. If you were getting at the actual cost of gas to your company, we would go to these records, wouldn't we, to ascertain the results from these records?

A. No, we would ascertain the basic figures from which to determine the result.

Q. You would ascertain your basic figures here?

A. Yes, how many gallons of oil, how many pounds of coal and other materials used; all that would not necessarily include all the cost of gas.

Q. There is some man in your company that has these figures month by month and year by year down to the fractional part of a cent, is there not?

A. Mr. Carter has presented that already in our exhibits.

Q. Not Mr. Carter, but I say there is some man, is there not, that has all of these figures showing to the exact fraction of a cent what it costs you to produce gas day by day and month by month?

A. I cannot say what detail there may be.

Q. Does not every well managed gas company in the United States have such a set of records, so that you, as the man chiefly responsible, or the chief engineer, can turn to those records and see at a glance exactly what it cost you to produce gas?

A. I can only say that I did not have it in Boston.

Q. And you do not know whether they have it here, the Consolidated Gas Company?

A. I do not know in what detail.

Q. When you were to testify as to the cost of gas, didn't you inform yourself as to these details?

A. Yes, I went over very carefully all those questions as
1849 to cost, in all these statements, and considered them.

Q. And as a result you deducted 10 cents from Exhibit 94 for contingent expenses, and you deducted 7 per cent. for fixed charges, and you deducted .48 for some taxes, and then you proceeded to add certain other things to make it come up to more than 74 cents?

A. No, I did not bring it up to more than 74 cents.

Mr. MATHEWSON: The statement submitted by the witness did not include fixed charges, you know, Senator; the computations he made here.

Mr. PAGE: He deducted fixed charges?

The WITNESS: I did.

Q. For the purpose of testifying here yesterday as to what it cost your company to produce gas and sell it, did you go through any computations based upon your station reports?

A. No, I took the records from the books.

Q. You took the exhibits that have been put in?

A. I took the books.

Q. You took a computation from the books, the exhibit that has been put in, Exhibit 94?

A. Yes.

Q. And assumed that to be correct?

A. Yes, I did.

Q. And your testimony as to the cost of gas is based entirely upon Exhibit 94 and not upon your knowledge of the exact conditions?

A. Well, I know the conditions of the company; I only take the books of the company; I cannot take any other figures, but the cost is shown by the books of the company.

Q. But you took computations from the books, which have been put in as Exhibit 94?

A. And certain other matters that I know of.

Q. You have had quite a large experience as a gas engineer
1850 and manufacturer of gas, haven't you?

A. Yes, I think I have.

Q. And you state that you did not keep a carbonizing sheet in your Boston works?

A. No, I did not say that. I had everything to the greatest detail, but we did not work it out in cents per thousand; that is the point.

Q. Exhibit 88-A?

A. No, the second one.

Q. That is 21st Street, Exhibit 114?

A. I do not want to talk at cross purposes, Senator, I am sure.

Q. Well, I ask you if you did not keep this in detail?

A. We kept everything in detail, in the most minute way. Perhaps I kept that in Boston more minutely than the majority of engineers. This is merely a question of quantity, and those quantities are kept very carefully.

Q. Which, multiplied by the price of units would give the result in dollars?

A. Yes, but the engineer is interested in maintaining the minimum amount of material used for a thousand cubic feet of gas and that is the thing which governs him in handling his work.

Q. Yes, but the managing director of the company is interested, isn't he, in seeing what it costs him to produce the article that he is selling?

A. He is not interested in the same detail and the secretary is interested in the details of his office; but the general officer is not interested in details of that sense, and the figures which we had of the cost of gas in Boston were not in greater detail than you have in this Exhibit 94.

Q. Yes, I do not doubt that.

A. That is the only thing that interests us in arriving at the cost of gas.

Here a recess was taken until 2 o'clock p. m.

1851 & 1852 After Recess.

At the request of Mr. Page, who stated that he has an important engagement elsewhere, and all parties consenting, an adjournment was taken until Monday, September 10, 1906, at 10:30 A. M.

Last Exhibits:

Complainant's 224.
State's U.
City's 44.

1853 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, MONDAY, *September* 10, 1906—10.30 a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Burr, Mr. Page, Mr. Kirby.

1854 WALTER R. ADDICKS, being further examined, testified as follows:

Cross-examination continued by Mr. PAGE:

Q. Mr. Addicks, taking up the statement which you read in evidence at page 1757, you deducted a certain amount for taxes, .48 of a cent?

A. Yes, sir.

Q. Will you tell me how that is made up?

A. Those are the taxes which have reference to the securities of other companies owned by the Consolidated Gas Company, but not involved in the gas making business.

Q. What was the amount?

A. The amount in dollars would be some fraction, approximately .48 of a cent, multiplied by the sales. I have not got the amount in dollars and cents at hand.

Mr. MATHEWSON: 47.6 was the exact figure, and he took .48. Mr. Carter testified to it. 13,283,163,767 feet was the amount of sales.

The WITNESS: Roughly, it is $63,758 and some cents. I took the nearest decimal.

Q. You included the two items on City Exhibit M, $5,257.48 and $57,965.39?

A. My figure multiplied out would be slightly in excess of the two figures mentioned $5,257.48 and $57,965.39. My figure amounted to $63,758.40, approximately. It is due probably to the difference in the hundredths part of the decimal.

Q. In this statement of the amount of the taxes in Exhibit 94 there was also $94,000 for accrued interest, wasn't there?

A. Wasn't it $70,000?

Q. $94,000 is my recollection.

Mr. MATHEWSON: $95,506.29.

1855 A. That would undoubtedly be the amount, that would substantially be the amount, Senator.

Q. Well, included in this item $965,843.88——
A. The total amount and part of the 7.32 cents?
Q. Yes.
A. Yes, there would be an item of taxes on securities owned by the company and also accrued interest on taxes.
Q. The $95,506.29 you did not deduct?
A. No, sir, I did not deduct that.

By Mr. MATHEWSON:

Q. No part of that accrued on these that have been deducted.

Mr. PAGE: I know that. Of course, our claim is that if you do not pay taxes and allow interest to accrue, that does not go into the cost of gas.
Mr. MATHEWSON: I understand.
Mr. PAGE: I wanted to know whether he has made that deduction as part of that statement.

Q. You have not taken out your repairs to gas stoves?
A. No, sir, but they appear in the statement. The return for it appears in the statement under miscellaneous income, 1.30.
Q. Of what is that miscellaneous income made up; have you got that?
A. Not in detail. It is all the miscellaneous income from the gas company, gas stoves, and includes returns from street lamps, and other items. I don't recollect the details.

Mr. MATHEWSON: Mr. Carter put in a statement Friday showing that in detail, Senator. It is all the miscellaneous income. That 1.3 cents is all the miscellaneous income, $172,000 and something over, of which $122,000 was the stove rents.
1856 The WITNESS: If I had realized you wanted the details of that I would have saved you a great deal of time and had it in dollars and cents as well as in cents per thousand.

Q. Having deducted the 10 cents per thousand cubic feet, which in Exhibit 94 is contingent expense, including renewals, you proceed then to add certain things. You add for repairs and renewals 4.62 cents?
A. Yes.
Q. What repairs are those?
A. Those are repairs and renewals from 1895 to 1900, I think I testified, which amounted to 12.31 cents per thousand.
Q. But you did not deduct from the total of Exhibit 94 the repairs that are set forth on that exhibit, did you?
A. Yes, sir, I think I did.
Q. Where?
A. 7.34 is the total for the calendar year. The repairs and renewals amount to 7.34 cents, and the difference between 12.31 cents and 7.34 cents gives 4.97 cents. That being the difference in the repairs and renewals, and for an average period of five years when the companies were making all their own gas, and the present time.
Q. Will you show on this memorandum which you read in evi-

dence at page 1757 where you have made the deduction for the repairs which appear on exhibit 94?

A. Well, I have the net difference, the entire repairs amount to 7.34 for the calendar year and the repairs during this period amount to 12.31, as I have testified before. That leaves 4.97. Now I have deducted from that .35 of a cent, bringing 4.62 as the actual difference between repairs for the period from 1895 to 1899 and the calendar year 1905.

By the MASTER:

Q. Where does that .35 of a cent come in; what is that for?

A. Certain repairs done on the machinery that was used in
1857 supplying gas to the Consolidated Gas Company by some subsidiary company. I am endeavoring to make a comparison here of a company making and selling its own gas. It is merely a matter of choice whether you take a twenty-year period or whether you take a period where they are making all their own gas. The twenty-year period covers the time when they are making and buying as well.

Q. Then, if I understand it correctly, the items for repairs and renewals, so far as Exhibit 94 is concerned, are included in this contingent item of 10 cents, which you deduct in the first instance in your present computation?

A. No, sir. The only thing that is included in the 10 cents are the actual replacements, which is 2.12 cents. That is, so far as that is concerned. I am speaking now of the 10 cents as a book charge, but extraordinary repairs due to the extraordinary wear and tear would certainly be considered in connection with the 10 cents.

By Mr. PAGE:

Q. How much less would that allowance have been if you had taken the last five years from 1900 to 1905?

A. I don't know. I did not make that comparison. They were not making all their own gas. That is the reason I took that comparison.

Q. Well, you are not making it to-day, are you?

A. That is very true, but we are going to make it, and because of the fact we are going to manufacture all our gas it is better to take that period. You remember, before the Gas Commission that was considered by the Commission as the fair period to take and I took that period on account of the views the Commission took. They thought the fairest way to make the comparison was at the time we were going to make our own gas with the time we were making our own gas. That is the reason I took that five years as our
1858 original proposition. I thought it was the fairest thing myself.

Q. The portion of your plant that is going to be devoted to the excess that you now buy will be an absolutely new plant?

A. Yes, sir.

Q. And the plant that was in operation from 1895 to 1900 was an old plant, that had been in use for 20 years.

A. Well, it was not a new plant. I don't know how long any specific part was in use. I have no doubt some parts of the plant were used 20 years.

Q. That was prior to the rebuilding of your water gas station and putting in more modern apparatus?

A. That is true.

Q. Now this 1.83 cents, what do I understand that is for?

A. That is due to the 22 candle power oil as compared with the 20 candle power on which we were working before.

Q. Well, you commenced in July last or July, 1905, to supply the 22 candle power oil, did you not?

A. We did, yes, sir.

Q. Then in exhibit 94 the cost of complying with that law would be carried in in this 33.17 cent cost per thousand sold on a total station cost?

A. That is true.

Q. And your allowance is for what it would cost you additionally from January to the 1st of July, 1905?

A. On the question of the oil only.

Q. Allowing for the oil.

A. I will give it to you accurately again if you would like to have it. During the second six months on the high candle power there were required 4.07 gallons of oil. Now the first six months together with the second six months was only 3.93 gallons of oil used. I assume if we were running the entire year it would require .14 of a gallon more for the entire year to maintain the full candle power.

1859 By Mr. MATHEWSON:

Q. .14 of a gallon more per what?

A. Per thousand cubic feet. I am dealing with thousand cubic feet in each case. Now that .14 of a gallon multipled by the average cost of the oil, 4.23 cents per gallon, would be an addition of .59 cents per thousand cubic feet as the total cost of oil for the .14 of a gallon.

By Mr. PAGE:

Q. Well, that was to comply with the candle power requirement from the first of January to the first of July, 1905?

A. Yes, that was the calculation I was trying to make.

Q. Turn to Exhibit 93, which is for the nominal year of October 31st, and refers to the station cost. There you will find it costs you less to manufacture gas for the calendar year than it did for the nominal year, although you had proceeded under two months longer of the higher candle power, 33.70 as against 33.17. Now isn't it a fact——

A. Well, won't you let me answer that question.

Q. Yes, if there is any answer to it.

A. It is a fact, according to Exhibits 93 and 94, that the station cost for the calendar year 1905 is slightly less than the station cost for the nominal year ending October 31, 1905, although the cost of the

oil for the calendar year 1905 is greater than that for the nominal year 1905.

By the MASTER:

Q. The nominal year ending October 31st?
A. For the nominal year ending October 31st, 1905.

By Mr. PAGE:

Q. Well, isn't it a fact that although the 34 degree Beaume
1860 oil cost more, that you have to use less oil to produce the same candle power with that as you would with 28 degree Beaume?

A. I cannot answer that question yes or no. In taking 34 degree gravity oil as for winter use it was certainly, as far as I was concerned, with the hope that we would use the minimum quantity of oil of that grade of oil during the winter months as compared with any other grade that we could obtain, considering its cost.

Q. That is, that it was the best and cheapest in the end?

A. I think so. And of the various grades of oil up to 34 I should expect we would use the minimum amount at 34 under the same circumstances as to temperature.

Q. You have added into your statement at page 1757 of the record the dividend of the National Coke & Coke Company?

A. Yes, sir.

Q. And you have not carried in, however, the value of $5,000 that was realized as surplus?

A. No, sir. I saw by the statement the other day that apparently the surplus was in the vicinity of $5,000. I don't know whether full provision was made for depreciation in that or not. If full depreciation has been considered, that $5,000 surplus, if credited to this account, would be equivalent to the $5,000 dividend, or an addition of .04 of a cent to this figure; that would increase the net return to 6.69 and .04 of one cent, making 6.73.

Q. Will you indicate from Exhibit 94 just what repairs you took into your statement to make the 12.31 which you used?

A. I could not indicate on this statement, because it does not appear in that statement. It appears on one of the exhibits. I don't know the number of this exhibit (indicating a paper). I took these figures here.

Q. The exhibit you refer to is State's Exhibit L. Now, will you
give us your method of arriving at your figure of 4.62, which
1861 is the result of the computation as stated on page 1757 of the record?

A. I took the five years from 1895 to 1899, repairs and renewals, which would appear on State's Exhibit L, as of 1895, 1896, 1897, 1898 and 1899, which amounts to 12.31 cents per thousand cubic feet, being the sum of all the expenses there shown, divided by the sales; so that, having that figure, we subtract from that figure the item which appears under 1905, similar item, 7.34, on the same exhibit, on page 2; that gave me the 4.97. Now, as for the five years the Consolidated Company was making and selling all its own gas, I thought it was fair to add to the repairs for 1905 that portion of the repairs to the generating apparatus of the other companies furnish-

ing gas, amounting to .35 of a cent, and thus raising our apparent cost of repairs from 7.34 by .35, which would be 7.69.

By Mr. KIRBY:

Q. Where did you get that .35?
A. That I got from Mr. Carter.
Q. It does not appear in any exhibit?
A. I don't know whether it does or not. I do not recall. Before the Gas Commission that did appear. Last year it was .32 of one cent, I think.
Q. Where does that figure appear?
A. It is in the testimony somewhere before the Gas Commission, I don't know just where.

By Mr. PAGE:

Q. What is this item of repairs and renewals for 1905 which foots up $974,289.65?
A. 25 cents, isn't it?
Mr. MATHEWSON: Sixty-five cents.
The WITNESS: Is that for 1905?

1862 By Mr. PAGE:

Q. That is what I have here.
Mr. MATHEWSON: $974,289.65.
The WITNESS: I have 25 cents. It does not affect the computation at all.
Q. Is that made up of items that appear on Complainant's Exhibit 94?
A. Well, I have not checked them over, though I assume so.

Mr. MATHEWSON: That 2.12 for replacements would be in the 10 cents. That has been testified to before you came in, Mr. Kirby. This is not familiar to you, but all that is on the record.

Q. Then you did not check up to find out whether the amount that you were deducting corresponded with the amounts that were set forth in Exhibit 94, although you were going to make your deduction from Exhibit 94, did you?
A. I cannot recall that I did or not, Senator.
Q. What is this item of .78 cents for, labor?
A. That is the difference between our average labor during a period of five years and the present labor.
Q. Labor of the same five years that you have taken before?
A. No, that is of the prior immediate five years. Pardon me, not five, four years.
Q. You have given the valuation of the plant as a whole?
A. Yes, sir, I gave my judgment of it.
Q. How did you arrive at that?
A. By taking a valuation of the coal gas works at $400,000 per million feet daily capacity, assuming that the works were complete, and with a holder capacity equal to three-quarters of the daily capacity. That in the case of the water gas plant the price would be

$200,000 and the holder capacity equal to one-half of the
1863 daily capacity. All holders in excess of those amounts I assumed to be valued in excess of the amounts given by which I arrived at the valuation stated, and assuming likewise a value for the oil gas plant at 21st Street.

Q. Then as I understand it, the holders up to three-quarters daily capacity were included in this valuation of $16,800,000.

A. The holders up to three-quarters on the coal gas and the holders up to one-half on the water gas. For instance——

Q. (Interrupting.) Why did you assume the three-quarters on the coal gas, and the one-half on the water gas as the proper allowance to make in valuing the plant and the entire——

A. (Interrupting.) Because I thought that under the conditions existing here that if I were erecting a coal gas works I should certainly have three-quarters of the holder capacity at the station. If I were erecting a water gas works I should probably only have one-half of the holder capacity at the station.

Q. Isn't it usual among gas engineers to allow holder capacity equal to the daily capacity for 24 hours?

A. Yes, but the remainder of these holders I would have out in the district, not in the plant.

Q. Well, in this $16,800,000 that you have given as the value of all the Manhattan plants, together with 18th Street, did you figure any of the holders on Manhattan?

A. Yes.

Q. And you assumed, as I understand you, a unit value of $400,000 for a million cubic feet daily capacity.

A. Yes, being the same as $400 per thousand.

Q. And $200 a thousand for water gas?

A. Yes, with the proportion of holders, as I have stated.

Q. I understand that is what you have estimated it would cost to replace the plant new, or is that the valuation of the plant as it stands today?

A. Well, in figuring I was thinking of the value of the
1864 plant on Manhattan Island as a going concern, replacing it as it is.

Q. Would that be replacing it with a modern and up-to-date plant?

A. My idea was replacing it as it was.

Q. On the same theory that Mr. Mayer gave in his testimony?

A. I do not recall the full theory of Mr. Mayer, but my idea was the plants as they stand in operation to-day that they were worth that much.

Q. You have not made an inventory of the plant, as did Mr. Mayer?

A. No, it was beyond my power to do so.

Q. The company has no inventory itself?

A. Yes, they have now a complete inventory as a result of this examination of Mr. Mayer's. Prior to that they did not have any.

Q. It has nothing to do with the book value of the plant, that statement here?

A. No, sir.

Q. Now, last July I asked you to get me up a statement of the

Astoria plant, showing in detail the cost of buildings and apparatus. Have you such a computation?

A. No, sir, I have not, Senator; I attempted to arrive at some figures for your benefit.

Q. I am glad it was for my benefit, but if the figures had been gotten out in the way that I wanted them, it would be more to my satisfaction.

A. I understood that Mr. Mathewson was in touch with you in regard to that, and that he showed you certain figures and that you made a memoranda of what you wanted, and I understand that a statement is being prepared, better than I could personally do it.

Mr. MATHEWSON: I did prepare one for the Senator, which I thought was what he wanted—or, rather, I had it prepared—and he wanted it put in better shape, and it was sent back to be put in
1865 better shape; in the meantime Mr. Bradley's foot was run over, and that has put us back, but they are at it now, or were on Friday, trying to separate it in the manner that the senator has suggested.

The WITNESS: I have taken that same statement and endeavored to separate certain items myself.

Q. You have not a copy of that?

A. No, I did it myself in spare hours that I had over there.

Mr. PAGE: Well, we will have to get at it the best we can, I suppose.

Mr. MATHEWSON: You suggested that I have that before Mr. Bradley was put on, and I told you I would have it unless something broke. I did not know that you wanted it with Mr. Addicks.

Mr. PAGE: I wanted it with any one who was going to testify as to Astoria property.

Q. How much did you state was the total investment at Astoria, on your direct-examination? Do you remember?

A. I have stated that the estimated cost for the first 20,000,000 units, not including certain additional items, was $13,134,519.65.

Q. Of that amount how much was expended for the purchase of the real estate?

A. The land valuation, $1,132,558.28. There is an item, however, of bond interest; I do not know whether that is included in that or not.

Q. Is that the cost of the land or the estimated value which was placed upon it?

A. No, that is the book value as it stands on our books.

Q. Well, by book value do you mean what it actually cost you?

A. In the statement here it says "Actual expenditures for land."

Q. How much did you expend on that land for grading and filling?

A. That work is not yet completed; I cannot tell what it will be.

1866 Q. What figure did you estimate for grading and filling to make up the total of $13,134,519.65 for the entire plant?

A. $317,000, in round figures. Grading, filling and certain excavations, $317,543.

Q. How much for docks?

A. Wharves, $190,000.

Q. Is that even, $190,000?

A. Yes, sir.

Q. How much for the tunnel?

A. $2,650,000.

Q. 15,000,000 feet holder capacity would be sufficient capacity for a 20,000,000 works, would it not?

A. When supplemented by one-fourth more in the city, coal gas at the works; but at the station there should be two holders. With that qualification, yes.

Q. You have just been giving your estimate of the valuation of the plants in Manhattan, estimated coal gas plant, with three-fourths capacity at station?

A. At station. I say three-fourths under the conditions in New York. Three-fourths would be sufficient, aside from the question that there should be two holders; in other words, that 15,000,000 for one plant should be divided into two holders.

Q. Well, but the capacity of the holder would be sufficient if it is going to be divided into two holders?

A. On the basis of capacity, yes, sir.

Q. How much have you added in this $13,134,519 for a second holder?

A. For the second holder, about $230,000.

By Mr. MATHEWSON:

Q. That is for the plant, is it not?

A. Yes, sir.

By Mr. PAGE:

Q. I have here second tank and holder, $700,000.

Mr. MATHEWSON: No, that is the holder itself.

Mr. PAGE: But it costs more, the tank, than a holder.

A. Yes, but there should be something in addition to that.

1867 Q. The holder is at $200,000 odd, and the tank is $700,000 odd.

A. $279,000 instead of $230,000.

Q. What would that be for?

A. That would be for a holder tank, including the cement required for construction. That is only the tank, not the holder.

Q. What was the $700,000 which you testified about, in regard to the second holder?

A. That is for the gas holder proper, including stanchions and crowns, girders, etc.

Q. You have figures for a coal storage bridge, $150,000 each, rope haulage and coke storage?

A. That is right.

Q. And in that was an item for $700,000 for a second holder?

A. That is only the steel work, sir.

Q. That enters into this statement that you have given for $13,134,519?

A. Not that one; that is the second one; but the first one would enter into it.

Q. Then I understand that none of this $2,282,500 which you testified to on direct examination is included in this $13,134,519, such as houses for employés; is that right?

A. I think that is true with this exception; I was a little doubtful whether that $150,000 was for the second bridge, which in my judgment we should have. There is one $150,000 in the original estimate for a bridge, and this $150,000 is for a second bridge, which would not be necessary for the plant except in so far as duplicating a bridge for handling coal, and some way to provide for accidents. For everything from scows and tugs down is not included in any part of the $13,134,519.

By Mr. MATHEWSON:

Q. No part of that $2,282,500 is included in the $13,134,519, is it?

A. I think that some of those foundations—while they were in the original, like this $80,000 for foundation appropriation—that was more than used up in the original estimate, and therefore it
1868 would have to be added here in order to complete this other work. In other words, while the original estimate may have considered that those certain foundations may have been done for certain figures, those estimates were more than used up, — required a further appropriation of $80,000 to complete the work, and therefore it is included.

Q. I want any part of the items that you have testified to as making up the $2,282,500 included in this figure of $13,134,519.

A. I do not know of any item as to dollars and cents that is so included in the $13,134,519; only simply as a matter of description.

Q. There is only then the second holder and the tank for the holder, of capacity of 15,000,000 cubic feet, that are in the figure of $13,134,519?

A. No, I have already told you that there is one holder, but two tanks.

Q. That other tank then is how much?

A. The two tanks together are twice the figure that I gave before.

Q. You did not give me the first?

A. I gave you a figure of $279,000 as applied to one; for the two, $558,000. You understand that in building one tank it is necessary to build two. In constructing one holder it is necessary to have a second tank if you expect at all to extend your plant, only having one holder.

Q. Why?

A. If you are going to have a second holder, you have to have a tank for it. We cannot dig a hole for a second tank if we have a holder there inflated and with water in the tank. We would have to draw all the water out of the first tank if we did not build a second tank the same as the first. Do I make myself clear?

Q. You make yourself clear as a statement of fact, but I cannot understand any reason for it.

A. Suppose we had a tank and the holder in it. Here is the first unit; (draws diagram illustrating); now, we want to put
1869 alongside of that a second one; we cannot put that tank in unless we let all of the gas out of that holder and let out all of the water.

Q. Why not?

A. Because the head of water in this wall here; this goes down about fifty feet and the hydrostatic head of water on that part would burst the whole tank right out.

Q. Then the second tank was built because of this condition, but it was not because it was necessary to take care of the product of your first unit?

A. I think it is. I think if you have only one holder you should have two. As I said today, the other $279,000 is for the second holder.

Q. You might have two.

A. Yes, that is true, if we were not going to build more than that, but in the plant at Astoria it would have been very foolish not to do so.

Q. Now, what other matters have you the value of in detail outside of the plant itself? By plant I mean pump manufacturing apparatus and buildings.

A. I have no items except what would be included within the plant itself, unless it be the item of a 60-inch main.

Q. Well, what have you got the 60-inch main at?

A. $620,000, including the pumping station.

Q. How much is the pay for the 15,000,000 foot holder? I believe that is finished?

A. No, the holder is just under way. It will not be finished until next year.

Q. Mr. Bradley stated that he was hoping to begin delivering gas from that station by the first of October.

A. He does hope to, into a main without the holder.

Q. Then, where will you deliver the gas, into the mains of the company in New York or into the holders?

A. It will go by the way of Ravenswood; it will go into one of the holders there with water gas, mixed with water gas there.

1870 Q. Has the company sufficient holder capacity to take charge of its present product, and the additional which will be manufactured at Astoria?

A. I don't recall exactly the holder capacity at the present, but it should be the daily capacity of the works. I think not.

Q. That refers to the entire holder capacity of the company, doesn't it, the rule that there should be a day's holder capacity?

A. Certainly. I think they would be short about 10,000,000 feet, that is my memory of it.

Q. We have got so far items amounting to $5,189,101.28. Will you give me in as much detail as you have it the items for the remaining $7,000,000.

A. Senator, I cannot agree with those figures unless I know what they are. If you now have so many millions——

Mr. MATHEWSON: Why not let him give a statement making up the $13,134,519.

Mr. PAGE: Very well, he may do that.

The WITNESS: Shall I give them consecutively from start to finish?

Mr. MATHEWSON: The Senator says that will satisfy him.

1871 The WITNESS:

Grading and filling and excavating, including Winthrop Avenue	$317,543.53
Dredging	160,000.00
Wharves	190,000.00
Coal and coke handling plant	700,000.00
Inclined retort house	1,400,471.92
Horizontal retort house	1,191,232.29
Purifying houses and contents	608,745.00
Boiler plant	49,717.31
Exhauster house and contents	47,730.06
Condensing plant	599,981.81
Land drainage	50,000.00
General Gas Connections	40,000.00
Tar and ammonia separation and storage	40,000.00
Water supply	20,000.00
Meter house and contents	65,560.44
Holder	640,800.00
Holder tanks	460,000.00
Tunnel under Ward's Island, exclusive of lining	2,050,000.00
Electric power plant	160,000.00
Gas pumping plant at Astoria	90,000.00
Office	50,000.00
Shops	40,000.00
Foundry, not included, first units, in this item here. Soundings and borings	200,000.00
Fences and temporary structures including salt water plant	50,000.00
Bi-product plant not included in these figures.	
Total	$9,321,782.36
1872 Brought Forward	$9,321,783.06
Undistributed expense 10 per cent	932,178.31
Total	$10,253,961.37
The 60-inch main with gas pumping plant	$620,000.00
Total	$10,873,961.37

Real estate	1,132,558.28
Lining of tunnel	600,000.00
Coal shed	400,000.00
Cement for two gas holder tanks	98,000.00
Overhead gas mains and apparatus between retort house and exhauster house	30,000.00
Estimated cost of first 20,000,000 cubic foot unit..	-13,134,519.65

Q. What do you mean by undistributed expense 10 per cent.?

A. Those are expenses that are in addition to all that the engineers can foresee in the construction of the works. In this plant up to date I think on the figures I made it has been between nine and ten per cent. over and above those figures I have given you. It covered the extra cost of building beyond the estimate and all other contingencies.

By Mr. MATHEWSON:

Q. Does it cover the company's engineering expense in laying it out?

A. Yes, sir, it covers certain expenses in connection with that beyond what may be figured as part of the expense on the estimate.

1873 By Mr. PAGE:

Q. Your engineering force, or the engineering force of the Consolidated Gas Company, is the one that laid out this work, isn't it?

A. There are certain engineers that we have that are on the Astoria payroll, and such expense connected with them is charged to them.

Mr. PAGE: I will let Mr. Kirby examine Mr. Addicks. He has been trying to explain a certain line of examination to me, and if there is no objection he may continue.

By Mr. KIRBY:

Q. It is the custom of electric light companies, Mr. Addicks, to plot the daily output of current on a curve, showing the number of kilowatts drawn off. Is that the custom of gas companies, to show the amount of gas either drawn from the holders or placed in the holders? Have you any records of that kind?

A. I don't know that we have. Some companies do or have plotted off for certain purposes a daily make or send out; others do it by the week. It may vary in various companies.

Q. Does the Consolidated Gas Company do that, either by the day or by the week?

A. I really don't know whether they do or not. I don't remember seeing such a curve. I have seen one by the year or something of that kind but I don't remember seeing one of a shorter period.

Q. You have records showing the output per day, have you not?

A. Not of the Consolidated Gas Company. We don't know what our output is from day to day.

Q. Do you know it from week to week?

A. No, we do not know it from week to week.

Q. Or from month to month?

A. Month to month we do know.

1874 Q. Do you have that for the different stations, or for the company as a whole?

A. The company as a whole. We also have the output of the various stations from day to day.

Q. Would not that show the days in the year upon which the largest amount of gas was drawn from the holders by the consumers?

A. Not in the case of purchasing gas, we would not determine that.

Q. Outside of the subsidiary companies from which you purchase gas, do not your own stations keep a record of the daily output of gas?

A. Of their own make?

Q. Of their own manufacture.

A. Yes. That I gave the other day in my testimony.

Q. And you were to furnish to Mr. Burr, I think, a statement showing when the maximum output was had or whether the period came within the month of January or December?

A. No, I think Mr. Burr wanted me to furnish if I could, the outputs of the 23rd and 24th of December, 1905, and I first said I would endeavor to do so, and then I called his attention to this condition of affairs that would prevent my giving the maximum output of the Consolidated Gas Company on any particular day.

By Mr. MATHEWSON:

Q. You mean the maximum sales, not the manufacture of the several Consolidated Gas Company's stations?

A. Not the manufacture, no. I can readily give the maximum amount of gas manufactured by each station of the Consolidated Gas Company, and those added together would give the maximum amount of gas made by the Consolidated Gas Company's own stations; but that is not the question. It is the sales of gas that I think Mr. Kirby is asking for, and I think that Mr. Burr wanted, and that I could not do.

1875 By Mr. KIRBY:

Q. You have a meter at each station showing the amount drawn from each station, haven't you?

A. No, the meter at each station shows the amount manufactured at each station, but the amount going out of the holder is not measured.

Q. That is only measured——

A. The algebraic difference between the meters and holders.

Q. And is that calculated for each day in the year?

A. Certainly, it shows the output so far as that station is concerned, irrespective of what is purchased, and what is purchased you know, may be put into the holder or into the mains adjacent to the holders, therefore we have no account of that.

Q. So that your records would show the maximum day of each station reckoned in the way you stated?

A. The maximum make, yes.

Q. No, you have stated that your meters show the make and your holders show the capacity at the station?

A. It shows the amount on hand at the station.

Q. And the difference between the amount which goes in and the amount in the holder to-day as it was yesterday would give you a basis of calculation to show how much was drawn out yesterday?

A. I know, but some of that gas might have come from some other source.

Q. You have a record of that, haven't you?

A. No, some may go into the mains immediately adjacent to that works. It would simply show the amount which has gone through those holders, but there might have been some gas gone through the main which while it came through the works and went out, it would not be indicated by the holder, because the holder might not have changed.

Q. Do you mean to say that it is impossible for you to say
1876 how much gas has been drawn from the holders each day of your various stations?

A. I don't think it is possible to say that definitely. Suppose you poured gas into the holder at the rate of 100,000 feet and the consumption might be 100,000 feet, you might be pumping 100,000 and 100,000 feet going out, and the holder would remain stationary.

Q. Quite so, and you would know your use was 100,000 feet?

A. No, we have no way of measuring it.

Q. Your holder remains stationary?

A. Yes, but we have no way *to* measuring it.

Q. So you have not used any more than you have produced?

A. We would have no way of measuring the 100,000 feet in the holder. I am assuming it was 100,000 feet, but we would have no way of measuring it except returns by the exhauster, and the exhauster not being an accurate way of measuring gas, it would not be taken as a definite measurement.

Q. Is it not a fact that the deduction of the gas that has passed through the station meter into the holder, being of a certain definite amount and the holder not varying one way or the other, it indicates that the amount of gas, drawn from the holder is exactly the amount which went into the holder?

A. That is an exactly correct statement so far as that station is concerned, irespective of the amount of gas obtained from some other source which may have gone into the holder or out of the holder.

Q. How do you measure that which comes from some other source and goes into the holder?

A. It is not measured.

Q. How do you reckon the amount to pay for it?

A. By computation at the end of the month, taking into consideration the amount made at the station every day which came into the

holder, and the amount of gas used by the consumers of the
1877 company with an amount estimated for the unaccounted for gas, and the difference is the amount sent to us during the month. Of course, it would be practically impossible to have meters large enough all over the city to measure that. It would take a very large expenditure of money to have meters to measure that.

Q. Then there is no way except by guess work that your various manufacturing plants know the amount of gas that they may be called upon to manufacture during the coming day, be that in December, or be that in July?

A. That is so of every gas company in the world. We never know what we are going to make from day to day.

Q. If it were an independent gas company drawing its gas from no other source than its manufacturing plant, then it would have an exact measurement of the gas going from its holders each day or each period of measurement, would it not?

A. Yes.

Q. So that company, contrary to what you say being merely a matter of guess work, would have exact figures upon which to base its expected gas to be manufactured?

A. I did not say it was guess work as far as the meter was concerned. I said it was guess work what we were going to have from day to day, but we do have in each works exactly how many feet of gas is made. That is a definite quantity measured by each meter in each individual works.

Q. How do you know how much to make each day?

A. From a general knowledge of the situation.

Q. But by no definite measurement?

A. Nobody can tell. It depends how much we have in our holders. If our holders are empty we have to fill them.

1878 Q. But you know in December that you use more gas than in July?

A. In a general way we know we will use so much apparatus, but it may be more or less. It is a very uncertain quantity from day to day. It all depends on how much holder capacity you have, whether you have to start up apparatus or gain or lose on your holders from week to week.

Q. I think you have made some figures, have you not, on the yearly consumption per consumer?

A. Yes, I had some figures.

Mr. KIRBY: Have they been put in evidence?

Mr. MATHEWSON: Yes.

Q. How did you reckon your number of consumers?

Mr. MATHEWSON: Mr. Carter prepared that statement. I don't know that Mr. Addicks knows.

A. Well, I have not refreshed my mind for this hearing, but based on the number of meters as I have it——

Q. And what meters were figured into that calculation—all the meters of the gas company installed at various parts of the city?

A. Active meters.

Q. What do you mean by active meters?

A. Those actually in use and recording, not those in the shop or out of use.

Q. No matter what the amount of gas might be which passes through those meters, or whether they were in constant use or not?

A. Well, those that were in the shop for repairs would not be in use at all.

Q. In other words, let us assume a store which formerly was lighted by gas and for some reason changed from gas to electricity, still keeping its gas pipes there, so that in case of necessity
1879 or breakdown of the electric light system, it could use gas; a meter would be there for the purpose of measuring that gas. You have considered those meters in your calculation, haven't you?

A. I think not.

Q. Well, do you know just what meters you have considered in your calculation.

Mr. MATHEWSON: He did not make the calculation.

A. I could not answer that.

Q. You simply took figures given you by Mr. Carter?

A. As to the active m-ters in use, yes.

Q. Would Mr. Carter know?

A. Mr. Carter would undoubtedly know exactly.

Q. On Thursday or Friday last, you gave your opinion in reference to the increased use of gas with the decrease of price per unit. Are you familiar with conditions in this city as they existed in 1899, when I think the so-called gas war was on?

A. I knew there was such a gas war.

Q. Do you know whether or not the consumers increased during that period or not?

A. I have a record here of the number of active meters, which would indicate that.

Q. Which would indicate an increase?

A. Yes, 1898 and 1899. Exactly what was the year of the gas war, do you recall it?

Mr. MATHEWSON: 1899 and 1900.

The WITNESS: Well, there was an increase in——

Mr. MATHEWSON: That is already in evidence in a complete statement which Mr. Carter testified to, showing the active meters each year from 1885 down to date, and the consumption per meter.

1880 Q. That is a fact, that there was an increase in that year as shown by the record?

A. The record I have before me between 1897 and 1898, shows there was an increase of about 30,000 meters; in 1898 and 1899 there was an increase of nearly 36,000 meters; and the following year, 1900, there was an increase of 22,500 meters.

By Mr. BURR:

Q. Those are not any part of them prepayment meters, are they?

A. They are everything.

By Mr. PAGE:

Q. Was the prepayment meter in existence in 1898 and 1899?
A. I am merely saying that it included everything. I think they were in existence then, I don't recall the first year we put them in use.

Mr. MATHEWSON: I don't think we had many of them, if any.
Mr. PAGE: No, I think not.
The WITNESS: There is a record of that.

By Mr. KIRBY:

Q. If they were in use, they were in the great minority?
A. I should think so. They have increased very materially in the last few years, but I am sure they were in use before 1898.
Q. You have testified that the chief engineer of the company, Mr. Bradley, stated to you that in his opinion, to produce 22 candle power gas during the winter it would be necessary to use a lighter oil than was then being used by the company?
A. That is right.
Q. You were of that same opinion?
A. Yes, absolutely.
Q. Would it not have been possible to have produced 22
1881 candle power gas by the use of a larger amount of 28 degree oil rather than to use 34 degree?
A. I don't know whether it would or not, but if so, I do not think it would be used economically, and it would be to the disadvantage of the distributing system.
Q. In other words, it would have been cheaper to produce 22 candle power gas with 34 degree oil than it would with 28 degree?
A. That was our effort.
Q. And during this period of use of 34 degree oil the Consolidated Gas Company bought this oil not only for its own manufacturing plant but for that of the other companies from which it purchased its gas?
A. That had been the custom and I followed the same custom. It does not include the Mutual, however.
Q. Was it an old custom?
A. It was the old contract and I simply followed it.
Q. Do you know how many years it went back?
A. I do not.
Q. Do you know whether it went back as far as 1904?
A. Well, it was that previous contract.
Q. Before 1904?
A. I cannot say, it was that previous contract.

By Mr. PAGE:

Q. By previous contract do you mean City's Exhibit 10?
A. I don't recollect. It was the one I had at the last hearing.

Mr. MATHEWSON: Yes.

By Mr. KIRBY:

Q. Has or had any effort been made by either the Consolidated Gas Company in its own manufacturing plants or by the subsidiary companies to produce 22 candle power gas with 28 degree oil?

1882 A. We had been using 22 candle power with 28 degree oil.

Q. I mean during the winter months?

A. This was brought around by the difficulties about the candle power.

Q. What were those difficulties?

A. I don't recollect, I simply took the reports that came in.

Q. We would have to refer to Mr. Bradley?

A. Yes.

Q. You as an expert in these matters must know what these difficulties are?

A. I anticipated what they would have been with 28 degree oil.

Q. What were they?

A. That we would not have been able to maintain the candle power.

Q. Why?

A. Because the grade of the oil is a very heavy grade oil, and during the severe weather it is not as stable as to its illuminants as the lighter grade oil.

Q. Have you ever had any personal experience in the endeavor to use 28 degree oil for 22 candle power gas?

A. I think the first experience I ever had in using as low grade as 28 degree was here.

Q. Do you know whether or not any of the subsidiary companies of the Consolidated Gas Company have used oil of as high a specific gravity as that, to produce 22 candle power gas?

A. They are using 34 gravity. I know they used 28 in Boston and had to drop it there for the same reason. They could not make their candle power with 28 degree oil.

Q. It has been made, hasn't it?

A. We make it during the summer.

Q. It has been made during the cold weather with 28 degree oil?

A. I presume you can at certain times. The moment we changed this summer from 34 to 28, we had a little cold snap and lost our candle power.

Q. But the main reason was you thought it would be more

1883 economical?

A. Certainly, so we could make our candle power that we had to, in order to obey the law.

Q. In making your calculations as to whether or not it would be more economical, did you take into consideration the fact that you had an existing contract for a certain price for that oil, and had to make another one of probably a higher price, and when you found it would be a higher price, did you reckon the difference in the calculation?

A. No, we have to maintain the law and obey the law in the first place, and I took in- consideration all the elements under which we

were compelled to work. We must obey the law. We have a fine of $1,000 for every station——

Q. Couldn't you obey the law with 28 degree oil?

A. We didn't think we could, no, sir.

Q. In endeavoring to purchase this 34 degree oil, I take it you made inquiry from no other company than the Standard.

A. No, I should think it would be an absurd proposition.

The MASTER: Mr. Kirby, that question has been asked at least twice before, to my recollection. That whole question of Standard oil and contracts has been thrashed out by Mr. Burr, and also gone into by Senator Page.

Q. Could not you have purchased 28 degree oil at a very greatly decreased price, and would it not have answered your purposes, if you could have?

A. It would not have, no sir. 34 gravity oil is the oil we know we could handle.

Q. Have you ever made any experiment with 32 gravity oil?

A. We have had 32, 34 and 28, but I knew as a matter of fact, the lower you go in gravity the less stable the oil is. If we could have naphtha at 62 degrees, we would have more stable gas still.

1884 Q. And we would have a very expensive one also.

A. Yes, exactly. And there is a happy medium which you have to reach.

By Mr. PAGE:

Q. How do you lose the candle power of gas? You say you lose it in cold weather?

A. How? I don't know how the candle power is lost, except it is lost.

Q. Are not the illuminants absorbed by the water in the tank, they being cold?

A. I don't know all the reasons for loss of candle power.

Q. Don't you get it back again in warm weather?

A. No, I think not, you may have hydro-carbons on your tank, on the water in the tank, which are precipitations in winter, which may or may not vaporize during the summer, or it may require heat to vaporize them. As a rule we do find hydro-carbons on top of the holder which is pumped out from time to time so as not to have it in too great quantities on the surface of the water. We also find it in our meters at certain times, and in our mains. We do lose candle power, but how or why we do lose candle power, I am not prepared to say, except that the illuminants do not stay in the gas.

Mr. PAGE: We have no more questions to ask.

By Mr. BURR:

Q. I understood you to say, Mr. Addicks, that you were not able to give me the information which I asked for at the last hearing regarding the maximum amount of sales around the Christmas holidays, December 23rd and 24th.

A. Yes, sir, of the Consolidated Gas Company, for the reasons I gave the other day and also reiterated to-day.

1885 Q. Let me ask you, is it not a fact that the maximum amount of sales on any given day amount to 70,000,000 cubic feet?.

A. For the Consolidated Gas Company?

Q. Yes.

A. I estimated at one time it would be somewhere around that. but it is a pure estimate. That was my estimate. I think at one time it was about 70,000,000 cubic feet for the Consolidated Gas Company alone, but I don't know whether that is exactly right or not, I could not say.

Q. That would be your estimate now?

A. I have no reason to change that estimate.

By Mr. MATHEWSON:

Q. Do you mean a maximum day's sales?

A. On any one day's sales.

Q. I didn't know whether you meant an average sale?

A. No, not at all. I mean a maximum day's sale. I cannot substantiate that any better than I have.

By Mr. BURR:

Q. It is somewhere between 65,000,000 and 70,000,000 certainly?

A. I should think so, that is my judgment of it.

Q. And you have stated heretofore, as you state now, that you estimate it at 70,000,000?

A. I have estimated it myself at 70,000,000 and showed figures for it. I cannot say how accurate the figure is.

Q. Are renewals or replacements due to the wearing out of machinery, mains or other wearing out of plant, or due to the necessity or other and larger machinery?

A. I think they would be due to both things. In a great many pieces of apparatus in the plant, on account of replacement due to requiring larger apparatus or machinery.

1886 Q. Have those items, once renewed or replaced by the Consolidated Gas Company, ever been renewed or replaced a second or a third time?

A. I don't know.

Q. Mr. Bradley would know more about that than you, I suppose?

A. Yes.

Mr. BURR: That is all I want to ask Mr. Addicks. While I have the floor, I want to inquire if it would be agreeable to counsel for the company to furnish me with an analysis of the real estate account or allow Mr. Hayward to make such an analysis from the books of the company themselves.

Mr. MATHEWSON: I don't quite understand what you mean by an analysis of the account.

Mr. BURR: I want an analysis of the real estate account on the books of the company from 1884 to date, including all the purchases and sales.

The MASTER: That cannot be for the purpose of cross-examination, can it?

Mr. BURR: No.

Mr. MATHEWSON: And besides Mr. Francklyn testified to the real estate which has been bought or sold since 1884, and it was almost negligible.

Mr. BURR: There were very few transactions, but they were not given so as you would allow Mr. Hayward to make that analysis — would simplify matters, or Mr. Carter can prepare it himself.

Mr. MATHEWSON: Doubtless Mr. Carter can have it prepared. It is for the purpose of your case I presume?

Mr. BURR: It will save bringing the books. I am saying that now so that you can have it prepared.

1887 Redirect examination by Mr. MATHEWSON:

Q. You were asked whether you had made any endeavor to secure oil from any other company than the Standard Oil Company. Do you know of any other producer that produces oil enough to provide for the Consolidated's requirements for Manhattan Island, except the Standard Oil Company?

A. No, sir. I have every reason to believe that the entire production in the United States of the quality of oil we require, outside of the Standard Oil Company, would not supply our requirements.

Q. Even if it could all be gotten together in New York?

A. Even if it could all be gotten together in New York.

Q. Assuming you had to employ coke instead of anthracite coal for water gas by reason of a strike or otherwise. How would that affect your working capacity?

A. It would reduce the water gas generators by approximately 20 per cent.

Q. How do you figure the maximum working capacity of a generating plant for a year with the maximum capacity for a day?

A. I always estimate that about two hundred times the daily capacity would be the safe working annual capacity.

Q. That takes into account the period required for repairs and also the smaller amount of consumption in the summer?

A. Yes, sir.

Q. When you said before the Gas Commission that the policy of the company was to replace in Astoria its generating plants in Manhattan, had any act then been passed or any order made reducing the charge for gas in New York City to private consumers to 80 cents?

A. No, sir.

Q. Or to anything below a dollar?

A. No, sir.

Q. You said that the company could produce gas at Astoria for the purpose of supplying the Borough of Queens. Were you
1888 referring to the physical capacity of the plant or to the franchise?

A. To the physical capacity of the plant. The mere fact of their presence in Queens, that we could supply Queens.

Q. If you had a franchise?

A. Yes, if we were enabled to supply it.

Q. It has been testified to that the ten cents per thousand charged to cover replacements and contingencies was first written into the books in May, 1905, following the report of the Stevens Committee. Was that the first time it was discussed?

A. No, sir. I had discussed it in the previous year.

Q. You have testified that you testified in Boston. How early did you testify in Boston?

A. I think my testimony was taken about the first of the year 1905.

Q. Did you testify at that time that ten cents per thousand should be allowed for contingencies?

A. I testified I thought there should be such an allowance.

Q. Had the Stevens Committee at that time been appointed?

A. I don't know that the Stevens Committee had been appointed. I don't remember the exact date of my testimony and the date on which the Stevens Committee was appointed, but I will say perfectly frankly that the question of this allowance of ten cents, so far as I was concerned, arose long prior to any sort of any investigation of the company.

Mr. MATHEWSON: There is no doubt is there, that the Stevens Committee was appointed in March, 1905?

Mr. PAGE: No.

Q. In reference to the expenditure for street lamps, you were asked why it was not deducted in operating expenses? Do you know whether that item goes into operating expenses under
1889 the custom of the Massachusetts Gas Commission?

A. Yes, sir.

Q. Or the New York State Gas Commission?

A. There is such an item in operating expenses in both the Commissions' printed reports.

Q. And on this side when you give your statement of income for the year 1905, Exhibit 96, does that include all the receipts from street lamps on the other side of the account?

A. Yes, sir, our receipts from street lamps and other receipts.

Q. You stated that you knew and you read what Boston was paying for oil. Do you know whether that was more or less than New York was then paying?

A. At the time I knew it was about the same, somewhere in the vicinity of 4½ cents a gallon.

Q. That was in 1905, wasn't it, the nominal year, when New York was paying a little over four cents?

A. Yes, sir, paying 4.04 at the same time.

Q. You were asked by Mr. Burr if you could explain the difference in cost between the different months by companies whose gas was delivered to the Consolidated under the agency agreements. Will you look at the Gas Commission Exhibit 105, which is City's Exhibit 36? It appears by this exhibit that the Central Union Gas Company was delivering gas to the Consolidated before July 1st, 1905, at about 26 to 29 cents per thousand, whereas after July 1st

it was 32 and even 34 cents per thousand. Will you explain that difference?

A. On account of the increase in candle power and the fact that there had been no examination of the Central Union Company's gas by the city's officials and they had no outside photometer whatever. They discovered that their amount of oil used had to be increased in order to maintain their candle power at 22, and that of course increased the cost of gas.

Q. Prior to the taking effect of the Act establishing the 80 cent gas, which was July 1st, 1905, was there any inspection for
1890 candle power in the Borough of the Bronx, in which the Central Union was operating?

A. I do not think there was any whatever.

Q. Do you remember the testimony that the inspection was confined to the Island of Manhattan by the officials of the city?

A. Yes, sir. I don't think there was any inspection in the other Boroughs as well, but Manhattan has always been inspected regularly.

Q. Were the services ever referred to in the gas business in your experience as mains?

A. Not in my experience, sir.

The MASTER: He said that on his cross-examination, did he not?

Mr. MATHEWSON: No, he was not asked so far as that. Senator Page stopped just short of that.

Q. Would there be any special difference between pressure in the main just outside the service and in the service at the entrance to the main?

A. Not material, normally.

Q. Assuming that you eliminate the effects of the law of gravitation on the distribution of gas, would it be possible in your judgment in that case to comply with the law establishing a pressure of between 2½ inches and one inch and still supply your consumers with gas?

A. Not in my judgment.

Q. You have been asked in reference to district governors? Under what system of pressure are district governors used?

A. As far as this country is concerned—I cannot say as to others—ordinarily by a high pressure line distributing gas into a lower pressure line, there being quite a large difference in pressure between the high pressure line and the low pressure line.

1891 Q. Is there any special danger in the use of the high pressure mains?

A. I think there is a very grave danger; the danger of fracture to the main under the crowded city conditions. The amount of gas escaping from a main under those circumstances would be so great as to be very difficult to handle, the accumulation of gas in the street would be very rapid, much more rapid than the ability of any emergency force to cope with, in all probability, and in addition to that the main itself is difficult to handle with our present methods of controlling by bagging. You have to have valves in all directions

in order to handle it. In suburban districts these reasons do not apply to the same extent because the territory is sparsely settled, and there is usually a considerable distance between the mains and the houses, and there are no subways or places for gas to accumulate in. Personally I am very much opposed to high pressure service in a crowded city.

Q. Well, in case your governors gave out or got out of order, what would be the effect as to the high pressure mains?

A. Any failure on the part of a governor would involve a very populous district and might involve serious accidents to the public.

Q. Mr. Bradley or Mr. Simpson has testified that in many streets of New York City it was impossible to lay down any additional mains of any sort, but assuming it would be possible and proper to instal a system of high pressure mains throughout the City of New York, would that be a matter of considerable time and large expense, or otherwise?

A. It would be a matter of a very large expense and very considerable time, and when we had finished we would not know what condition we were in as far as distribution was concerned on account of the lapse of time in starting and completing the work.

Q. In other words, the character of distribution to different sections, according to your experience, is changing?

1892 A. According to my information. I have more information in New York than I have experience. I have experience elsewhere.

Q. Would the expense of such a system amount to hundreds of thousands of dollars or millions or what, generally speaking?

A. I should not like to state any figure, but I would not set it at less than millions of dollars.

Q. Now, let me ask, assuming you establish a system of high pressure mains, with the conditions in New York City, would it, in your judgment, then be possible to distribute gas so that never at any time in any distributing main at any time would there be a pressure outside of two and one-half inches on one side and one inch on the other?

A. I should not undertake to carry out any such proposition, Mr. Mathewson.

Q. I ask whether in your judgment it could be done?

A. I do not believe I could accomplish it. That is my frank opinion.

Q. Do you know of any city or place in the world where there is any such provision as that?

A. I have not been able to ascertain any city that had any such provision or approximated it.

Q. You know some cities which have minimum requirements, that there shall not be less than one inch pressure?

A. I do, and in some cases less than that—.6 of an inch.

Q. Do you know of any city which provides a maximum pressure?

A. I never heard of one.

Q. When you testified as to the estimate for additional enrich-

ment, before the Gas Commission, you were dealing with the nominal year ending October 31st, were you not?

A. I was.

Q. And that contained how many months of the 22 candle power?

A. I think four months.

Q. And your present testimony is in relation to the cal-
1893 endar year containing six months?

A. Six months.

Q. Senator Page has asked you whether the plant at Astoria will not be new. Is it not your experience that a new plant frequently require- repairs?

A. Parts of this plant are being repaired now.

Q. Is it not a fact that from the moment a plant starts up in operation that it requires repairs, whether new or old?

A. Yes.

Q. And isn't it sometimes true that before a plant gets to operating smoothly, that repairs and changes are required that you do not have in one which had been operating some time?

A. More changes than repairs. Sometimes the retorts after they have been repaired, they probably are better than when they were originally put in; they are apt to be so. A second set of retorts on an inclined bench would probably be better than the first set because all the remainder of the setting had gotten its bearings and only the retorts would be affected by the next heating.

Q. Your attention has been drawn to the fact by Exhibit 93 that the station cost of gas to the Consolidated for the nominal year ending October 31st, was 33.7, while for the calendar year the station cost was 33.17. Which figure did you take as the basis of your computation presented here, showing the cost of gas to be 69.36 cents?

A. I took the cost of gas as by Exhibit 94.

Q. That is the lower cost?

A. It is a lower cost in the station cost, yes, sir.

Q. For gas manufactured by itself?

A. In the stations cost, yes, sir.

Q. You use the term "undistributed expense" in speaking of the ten per cent., which you added to get the complete value of the plant. Is that an engineering term or is it one which you used?

A. Well, sometimes used that way, or sometimes put in as
1894 "uncharged labor and material." It practically means the same thing.

Mr. MATHEWSON: I have nothing further.

By Mr. BURR:

Q. Is it your opinion, Mr. Addicks, that the pressure should not be regulated at all by law?

A. I don't see any necessity, Mr. Burr, for regulating the pressure of a gas company, absolutely none, and for this reason no gas company wants to carry too low a pressure because they do not want to run the danger of the gas going out. That would be a serious danger and therefore it is useless to place too low a pressure limit on it.

As far as a high pressure is concerned, no gas company desires to give any higher pressure than is necessary to reach the necessities of the apparatus used by the consumers. They have got to overcome a great many difficulties. In the first place you have got to reach the necessary pressure on each piece of fuel gas apparatus that may be used. The Welsbach burner requires the maximum. The higher pressure you get on the Welsbach the higher efficiency you get in your burner. As regard gas stoves, my judgment is somewhere around two inches as the minimum they should have, but the tendency of the gas business is to increase the pressure in order to get greater efficiency. Of course the objection to increased pressure is unaccounted for gas and leaks from mains, and no gas company wants to carry any higher pressure than they think is necessary to supply their consumers. You ask me frankly whether I think there need be any provision in the law as to high pressure, and I am frank to say I don't think there should be anything of the kind.

Q. That should be left to the companies themselves?

1895 A. That should be left to the companies themselves. I think so.

Q. Because no gas company would be willing to use the pressure as a means of compelling the consumer to pay for more gas than he actually burned?

A. Not unless he is the most shortsighted, misguided manager you could imagine, because it is a most foolish proposition. As far as a minimum pressure is concerned I can see there might be some propriety in that in making sure that the public would not be affected by danger from too low a pressure. I have known in my own experience where I have had too low a pressure, lower than an inch, and all I could do would not prevent it. That is generally the trouble by having a low pressure.

Q. So you think the law is objectionable because it is not only impossible to comply with but it is unwise?

A. If the State wants to pass laws, if I can obey them and know how to obey them I am going to obey them, as far as I am individually concerned; but when it comes to a question of my opinion I am frank to say that I think it is extremely unwise. If I could see any way of obeying this law I certainly would do so, as far as I am concerned, or recommend to the company to do so.

By Mr. MATHEWSON:

Q. You said that you tried to obey the law and found it impossible. What was the effect, so far as complaints coming into the company were concerned, with your attempt to keep inside the law?

A. Why, we had not only thousands of complaints, but in some of the cases we were threatened with suits on account of not supplying gas, people could not get sufficient gas for their purpose.

Q. The old flat flame burner required perhaps only an inch pressure to operate, did it not?

1896 A. It can be operated even under that; a half inch pressure could be used.

Q. But the new apparatus, such as the Welsbach and stoves, require——

A. They should have at least two inches pressure, and I think that for general use three inches would be better than two inches.

By Mr. PAGE:

Q. The reason of those complaints was largely because of the insufficient piping of the houses, wasn't it?

A. I don't know in every detail; I have not investigated every detail. I only know what the pressure was in the mains. I should think that if they had insufficient piping it would contribute to the difficulties that way, but to what extent I cannot say. You take the linotype machine, for instance, for a newspaper office—I think one of the very first to complain was a newspaper because they could not maintain the heat on their linotype machines on account of lack of pressure.

At one P. M., upon the Master declaring a recess for lunch, Mr. Burr requested that the recess be extended till 2:30 P. M.

Recess until 2:30 P. M.

1897 After Recess.

The Master calls the attention of the counsel to the fact that an order has been made by Judge Lacombe extending the time of the complainant to present its evidence in chief twenty-one days from the 25th of August, 1906, with the further proviso that the complainant is to be allowed one full day and a half after the receipt of this order to complete its *prima facie* case, the witnesses being called and examined successively on the direct, without interruption. The balance of the extension granted by this order will be allotted the defendants for cross-examination, the special Master being given authority to extend such time five working days more, such extension however, to be deducted from the defendant's forty-five days.

ROBERT A. CARTER recalled:

Mr. MATHEWSON: I have Mr. Carter here for further examination, if desired.

Mr. PAGE: As far as the State is concerned, there is no further cross-examination of Mr. Carter.

Mr. MATHEWSON: I furnished to Mr. Burr a statement of the funded debt of the company this year, and also of the fixed charges, and I am also furnishing him with the number of services in the ground, 1903, 1904 and 1905, and services relaid since those dates.

Mr. BURR: That is, you now hand me that paper.

Mr. MATHEWSON: Yes, I now hand you that paper. Much of the balance of the information for which you asked appears in the record already in one form or another, including the amount re-
1898 ceived from each company month by month, which has already been offered, and the amount of production of each manufacturing plant of the company, which also appears in the ex-

hibit which we delivered to Senator Page, being for 1905, made up in the same form as Exhibit 145 of the Gas Commission Report for the nominal year ending October 31st, 1905.

Mr. PAGE: Has that been presented yet?

Mr. MATHEWSON: Hasn't it? I gave it to you the other day. I think you put it in evidence.

Mr. PAGE: Was that the 83 pages?

The WITNESS: No; I have a copy of it here.

Mr. BURR: You are going to furnish me with the information which is not already on the record, as you claim, is that it?

Mr. MATHEWSON: No, some of it we cannot. Your first request was for the capacity of coal gas plants in 1884. Mr. Carter is not an engineer, and is not familiar with it. Mr. Bradley probably will be able to tell you.

As to all contracts and vouchers for all holders constructed since 1884, giving the value of the holders, foundations and valve houses, that would be something we could not undertake to do. The vouchers are not in such shape that from them you could tell the exact cost of each holder in any event.

The number of services you have. I have given you those for six years past. I have given you the principal of the outstanding obligations and for each year, and the amount paid.

The average of the annual quotation for the bonds or debentures are accessible, and I understood that you could look at the quotations as well as we could hunt them up. We have no record of them in the books of the company.

1899 The amount of gas received appears, and the price paid for same to each company under the agency agreement appears by the exhibit already in, showing the amount of gas received, and by the agency agreement showing the price.

"The date of the largest sales in 1905;" Mr. Addicks explained this morning that that would be impossible to give, the exact sales per day. The best he could do would be an estimate.

"Manufacturing capacity of coal gas and water gas plants with which the Consolidated Gas Company has an agency agreement" has already been testified to by Mr. Bradley and Mr. Addicks.

"Monthly table of cost station by station," that appears in an exhibit which I have handed to Senator Page.

The question "Bring in all the bids, whether successful or not, in connection with holders constructed since 1884;" That we could not undertake to do. I do not think that we have them and I do not know that it would be material if we had.

The same as to the pipes.

Now, "Payroll for December, 1905;" that is a very extensive list, and Mr. Carter will produce such samples or such other illustrations as you may please, if you will indicate what you wish. I understood that your expert had checked them over and verified the statement that we presented, as far as he thought necessary.

"Produce the vouchers for holders built since 1895"; there would be a bushel basket full for each holder, and it would not lead to the full value or cost of the holder anyhow; they do not appear in the shape of vouchers.

Vouchers for oil for 1905 to 1906, up to September 1st.
1900 The record books have already been marked in evidence, showing that, or rather for identification, and all the deliveries have been read off, covering the period, before the Master.

"Give the age of all apparatus and buildings costing more than $1,000." That is impossible to give, but as far as possible it was generally testified to by Mr. Mayer, who had his statement as to when the apparatus was installed.

Mr. BURR: I said, leaving out those testified to by Mr. Mayer.

Mr. MATHEWSON: Now, I think I have covered all excepting those respecting which I have given you statement.

The MASTER: Is there any further cross-examination of Mr. Carter by you, Mr. Burr?

Mr. BURR: No, I have no further cross-examination now.

The MASTER: Then, Mr. Mathewson, your redirect, if you have any.

Redirect examination by Mr. MATHEWSON:

The WITNESS: In reference to some questions that were asked me last Wednesday, in connection with some figures prepared by Mr. Cuthbert, the expert accountant for the State, the item was a credit, aggregating, If I remember, something like $55,000 to the "expense, general office" account.

Mr. MATHEWSON: Take the exhibit and tell to which you refer.

The WITNESS: There was no exhibit showing that particular information.

Mr. PAGE: Analysis of general office expe[illegible]?

The WITNESS: That is it.

1901 The question was whether the full amount credited to that account during the year had not appeared as a charge in some other operating expense account and while I expressed doubt on the subject at the time, I was not able to say positively that the credit shown of $55,896.13 was not all charged to other operating expense accounts. I have investigated those credits since testifying and find that the amount credited to that account during the year, which appear as a charge in other operating accounts, was $28,876.60, the balance being adjusting entries and in no way distributing the expense over other accounts. In that connection, as the question comes up in connection with the item of "expense, general office," in Exhibit 94, and as there is a considerable difference between that item in Exhibit 94 for the calendar year 1905 and Exhibit 93 for the nominal year ending October 31, 1905, that is to say, some -63,176.29, I have combined three items appearing in Exhibits 93 and 94 to show the variation between the three items combined, the same items appearing each year in these combined items. In making the combination one of the clerks apparently did not in each year group the accounts in identically the same way, so that differences appear in these three items, expense, expense account general office, and advertising and legal, which are not differences at all except in the methods of grouping if the aggregate of the three items is taken. In other words,

three items for the calendar year 1905, Exhibit 94, are made up as follows:

Expense	$490,855.36
Expense, general office	$339,999.51
Advertising and legal	$105,800.02
Total	$936,654.89

1902 The three items appearing in Exhibit No. 93, being the operations for the nominal year ending October 31, 1902, are as follows:

Expense	$583,278.52
Expense, general office	276,823.22
Advertising and legal	62,861.02
Total	$922,962.76

The difference between the two totals is $13,692.13. In other words, in combining these three items, the differences that appear in the individual items practically are eliminated in that total.

By Mr. PAGE:

Q. The question that I asked merely went to this, that the legislative investigation cost the company $77,806.76, and that the less credit was a distribution of $55,896.13 to other accounts, legal and advertising, and whatever the others were—expense, general office, and what was the other item you say——?

A. Expense, expense general office, advertising and legal.

Q. That the $77,806.76 was an expense that is properly chargeable to legislative investigation; that is right, is it not?

A. No, that is not the case, as it happens. The total expense in connection with the legislative investigation for the year amounted to $51,677.71, of which $28,876.60 was for legal services, which amount was taken out of the incidental expenses, account general office, and charged to legal expense and advertising. The balance represented other expenses in that connection, printing principally, and overtime of the clerks preparing statements, and expenses of that nature. The reason so large an amount appears in that
1903 statement, Senator, is because there was an error made in charging into that expense account, general office, the sum of $27,019.53, which should have been a charge against suspense account, and it was the taking it out of the expense account, general office, and putting it in suspense account where it belonged that created so large a credit in the account. It simply corrected an incorrect journal entry.

By Mr. MATHEWSON:

Q. Is that all?

A. Just one moment. I was asked I think, by Mr. Burr, in connection with coal contract, marked City's Exhibit 23, to what extent the price stipulated in the contract has been affected by the variation in freight rate and in the mining rate, according to the terms of the

contract. The contract was dated in 1903. In that year there was an increase of ten cents per ton in the freight rate, which operated to increase the cost of the coal from $3.50 to $3.60 per ton. In the following year there was a decrease in the mining rate of 5 cents, which under the terms of the contract operated to reduce the cost 7½ cents, bringing the price from $3.60 to $3.52½. In that year, however, we were getting a better figure from other companies and at our request they took 12½ cents more off the price of the coal, reducing it to $3.40 per ton. In the following year, there being a further reduction generally in the price of coal, they took 25 cents per ton off of the price, reducing it from $3.40 to $3.15, which price went into effect until the contract expired in 1906, the saving the company effected through securing these reductions in the price of coal amounted to some $90,000.

Q. You stated in your original examination that the cost to 1904 the company of meters, cocks, connections, &c., amounting to $3,802,544.50, was divided between meters, cocks and connections and other items. Will you state the various items and the amounts of each making up that $3,802,544.50?

A.—

Meters	$2,941,037.07
Cocks and connections	313,714.47
Pipe and specials	113,259.64
Tools and implements	56,345.17
Office furniture and fixtures	39,708.73
Horses, wagons and harness	24,128.35
Scows	19,816.15
Automobiles and accessories	6,915.15
Gas stoves	287,619.77
Total	$3,802,544.50

Q. And you stated, from recollection that the estimate on the cost of reproduction of those upon current prices which the company is paying for such was something over four million dollars. Have you the exact amount?

A. Yes, $4,201,615.35.

Q. Does the company make any inventory of its pipes and specials?

A. Yes, sir, such an inventory is made annually.

Q. You were asked in reference to the time when the 10 cents per thousand was discussed, which was charged in the company's books from January 1st, 1905, to cover repairs and replacements and contingencies. Was it discussed at or before May, 1905, when the entries were made?

A. Yes, sir, it was.

Q. How long before that?

A. I cannot be exact as to the date, but it was some time in the fall of 1904 that the matter was first discussed.

Q. Was the 10 cents discussed at that time or some other figure, do you remember?

A. My recollection is that some other figure was discussed; that 10 cents was considered too small an estimate, too conserva-
1905 tive an estimate to provide against all of the contingencies that were likely to arise, and I don't know but that it was some time after that, before it was finally decided upon to use the 10 cent rate.

Q. Before the formation of the National Coke & Coal Company, how did the company provide for its cartage of coke?

A. The cartage was done by contractors who charged the company a given price per load.

Q. Do you know how the results compared to the company since the organization of this National Coal & Coke Company as to the cost of cartage and receipts of coke?

A. I would say in a general way that the dividends which we received represent the profit over and above what we would have paid the contractors under the old arrangement.

Q. Generally speaking, is the result more favorable to the company or less?

A. Much more favorable to the company. I might express that a little more definitely. The dividends are saved out of what we paid the contractors under the old condition, because the allowance to the coke company is approximately the same thing, so the dividends come out of that.

Q. In Exhibits 93 and 94, showing the coke produced, it appears that certain coke was delivered from one station to another. Isn't the coke charged to the station to which it is delivered?

A. The coke is.

Q. And credited to the station from which it is delivered?

A. That is the case.

Q. And it is charged and credited at the same figure?

A. At the same figure, yes, sir.

Q. So that in result it would make no difference what figure was used so long as it is both charged and credited in the final cost of gas?

A. That is the case, yes, sir.

Q. In reference to the gas received under agency agree-
1906 ments, if I understand you correctly; you take the amount of the output of the company which makes the gas, and deduct from that the amount which their own consumers receive as by their consumers' meters and deduct leakage, and the balance is the amount which the Consolidated Gas Company receive?

A. Yes, sir.

Q. And then that balance being delivered to the Consolidated Gas Company, the leakage occurs in the mains of the Consolidated Gas Company, and you compute that by taking the total amount of gas received and gas which leaves your stations, and from that total deduct the amount which the consumers' meters register?

A. Exactly.

Q. Is there any general interlocking of the mains of the Consolidated Gas Comapny and other companies except at the point where gas is delivered?

A. There is not, no, sir.

Q. By City's Exhibit E it appears that the amount of interest on taxes which is included in Exhibit 94 for the calendar year is $94,506.29. Does any portion of that accrue on the portion of the tax relating to the income from securities of other companies or tax on excess dividends invested in securities of other companies amounting to about $62,000 or $63,000 in total?

A. None whatever.

Q. Does this interest represent interest on taxes which you have failed to pay because they were overlooked or you did not desire to pay them, or on taxes which are contested by the company?

A. On taxes that are contested.

Q. Do you pay your taxes so as to get the advantage of any rebate?

A. Always, when we pay them.

Q. Under what advice, if any, were these taxes contested on which the interest of $94,000 and over accrued?

A. They were contested upon advice of counsel.

Q. That they were legal points?

1907 A. The consideration that there were assessments concerning which certain legal points should be decided by the courts before the taxes were paid.

Q. Legal questions which counsel advised should be determined by the court?

A. Yes, sir, that is the case.

Q. And have you contested any of these taxes without such advice?

A. In no case, no, sir.

Q. It is in evidence I think that the amount of assessment for taxation for your special franchises including mains and services in streets for 1906 is $31,900,000. Have you the amount of the assessment for 1905?

A. In 1905 it was $27,300,000.

Q. And what increase is that?

A. $4,600,000.

Q. At the tax rate prevailing in 1905, what increase in taxes would that make on account of your franchises for 1906 as compared with 1905?

A. The additional tax would amount to $68,563.87 or .52 of one cent per thousand cubic feet sold during the year 1905.

Q. And in 1906 is there any other special or additional assessment of a character which was not levied in 1905?

A. There was, yes, sir; assessments aggregating $5,455,000, which differ from any assessments that have ever been levied against the company before.

Q. Were there never any assessments of any corresponding character before?

A. Never, no, sir.

Q. And at the tax rate for 1905 what would be the tax if sustained?

A. $81,307.81 or .61 per thousand cubic feet of gas sold during 1905.

Q. And the total of these two items would be how much in money and in cents per thousand?

A. $149,871.68, equal to 1.13 cents per thousand cubic feet.

Q. You have been questioned in reference to the entries in your books in reference to gas sold to the city. The contract dur-
1908 ing this period called for how many feet of gas per lamp per hour?

A. Three cubic feet per lamp per hour.

Q. And that was the amount which you could charge to the city under the contract, wasn't it?

A. That is the case, yes, sir.

Q. And was that the amount you entered in your books as a charge against the city?

A. The entry is not made in the books in connection with any charge, Mr. Mathewson; it is only for statistical purposes. The quantity supplied the lamps is estimated for the purpose of determining the total volume of our sales, and as the contract called for that quantity, we estimated that quantity although——

Q. When you arbitrarily separated the item of lamps and maintenance?

A. Yes, sir; that is the case.

Q. Do you know what the tests show as to the amount which the lamps do burn?

A. Yes, sir; the tests were made that indicated that the Welsbach burners——

Q. Well give a unit. I do not care for the details.

A. Well, they would use on an average from recollection 3.77 cubic feet of gas per hour; the ordinary flame burner would use considerably more than that.

Q. Taxing Exhibits 93 and 94 and various items therein, charged to manufacturing and operation of gas, is there any duplication of expenses in any of those items?

A. None whatever.

Q. Have you computed at 3¾ feet per hour as the basis of lamp burning, whether there would be any balance in your favor or against you on this $289,000 item that appears as street lamps?

A. On that assumption we would have lost $28,645.33, that is, we would have had but $260,614.26 to pay for maintenance and other lamp expenses amounting to $289,259.59.

Q. So on the computation of the gas actually delivered to
1909 the city that would be the result according to your test, would it?

A. Yes, sir.

Q. Referring to the tax to the State Comptroller upon excess dividends over 4 per cent. and upon gross earnings, can you reach for the calendar year 1905 any closer amount than the amount assessed for the year ending November 1st, 1905?

A. No, sir.

Q. Have you a statement of the amount which has been actually expended at Astoria for that construction? Mr. Bradley testified to some figures.

A. Yes, sir; the amount actually expended to June 30, 1906, was $6,979,545.31.

Q. Mr. Bradley's figure was slightly higher than that by a few thousand dollars. Can you state how the difference occurred?

A. I think Mr. Bradley in his figures possibly included the uncompleted contracts.

Q. Yes he did.

A. They would amount to $1,460,974.97, that would make a total of expenditures and uncompleted contracts $8,440,520.28 and the difference between these figures and those that were testified to by Mr. Bradley is the cash and accounts receivable that he included as expenditures, although the Astoria Company had not actually expended them. He took into account the amount that the Consolidated Gas Company had advanced to the Astoria Company, assuming it all to have been expended. As a matter of fact they had some cash on hand and some money due from sundry parties that we have excluded as not having been actually expended upon plants or upon lands.

Q. His figures were the investment of the Consolidated Gas Company in what they had advanced to Astoria?

A. That is the case, yes, sir.

Q. And your figures now are the amounts the Astoria Company had actually expended, including the cash and accounts re-
1910 ceivable which had not yet gone into the plant?

A. That is the case, yes, sir.

Q. Mr. Carter, you were asked by counsel for one of the defendants whether you made an affidavit and an affidavit in rebuttal in this case and whether you referred to your familiarity with the report of the legislative committee of 1886 and stated that their investigation into the affairs of the gas company lasted nearly a year, and whether you called attention to the haste in which the investigation before the Stevens Committee was conducted and whether you quoted from the majority report of the committee to sustain your contention as to the proper valuation of the property by the constituent companies. Have you that affidavit before you?

A. I have.

(Witness produces paper.)

Q. I will ask you to define what portions of that affidavit refer to the matters respecting which counsel examined you and show precisely what you did state.

Mr. BURR: I object to that, if your Honor please.

The MASTER: Does not that show for itself?

Mr. MATHEWSON: I ask him to define the portions. I propose to offer them in evidence, and to have him state what he did say.

Mr. BURR: He admitted everything he did say upon which I asked him on cross-examination.

Mr. MATHEWSON: No.

Mr. BURR: He was asked categorically in reference to certain statements made in that affidavit and he was asked if that was
1911 his opinion now as it was then and he said it was his opinion.

The MASTER: It would seem to me that the affidavit speaks for itself. If you want to offer it in evidence, very well, but

it is before me under the equity rule. I sustain the objection. The witness can answer, of course.

Q. Well, will you state the portions now?

A. Shall I read it?

Q. No, you need not read it; state the folios beginning with the words.

A. On page 37 of complainant's affidavit in rebuttal beginning with the sentence, "The Senate Committee of 1886, Senate Document 47, of that year, completely sustained the value of the company's assets at that time."

Q. Over to?

A. To page 39, ending with the words "its property rights, in behalf of which it has sought the interposition of this honorable court."

Q. And will you point out the portions of it prior to that, in which you refer to the decision of the Committee of 1886, and quoted its report?

A. On page 25, beginning with "in 1885 the Senate of the State of New York appointed a Committee," and ending at the bottom of page 27, "and upon the finding of said committee, that such provisions had not been violated."

Mr. MATHEWSON: Without taking time to read it, Mr. Master, and as a shorter way, I offer in evidence the portions of the affidavits to which the witness has referred.

Mr. BURR: I object to that because it embraces many things about which he was not examined in this regard.

Mr. MATHEWSON: Not a thing.

The MASTER: Do you want to have it printed in later or marked as an exhibit?

1912 Mr. MATHEWSON: Perhaps the shorter way would be to mark it as an exhibit.

The MASTER: I will take it.

Mr. PAGE: I object to it on the ground it is incompetent, irrelevant and immaterial, and not the proper way to prove the facts where a witness is on the stand.

Objection overruled; exception.

Mr. Burr and Mr. Page except.

Mr. MATHEWSON: There is no objection that I have the printed copy here instead of the original affidavit?

Mr. PAGE: No.

Papers received in evidence and marked Complainant's Exhibits 225 and 226.

Q. You were asked in reference to the war of 1899 and 1900 between the Consolidated Gas Company and some other companies and were asked how low the gas was sold in those years. Can you give the average rate at which gas was sold in 1899?

A. That is one of the exhibits, Mr. Mathewson. I am not sure that I have got it. The average cost in 1899 was 84.56 cents per thousand cubic feet.

Q. And in 1900?

A. In 1900 the average price was 82.46 cents per thousand cubic feet.

Q. You were asked also whether there was any surplus in 1899 and 1900, and you replied that there was. What did you mean by surplus, as you used the term?

A. I mean that there were earnings over and above the fixed charges. I did not mean that there was any surplus over dividends that were paid during those two years, because as a matter of fact in both years the dividends exceeded the available surplus for the year, some seven hundred thousand dollars, I think, the first year, and over a million dollars the second year, that is in 1900.

Q. You were asked in reference to the competition of the
1913 companies in which the Consolidated Gas Company holds stock. Did you observe any diminution in the competition of the electric companies since the Consolidated Company owned their stock?

A. None whatever. On the contrary.

Q. Is not that business being steadily pushed as far as your observation goes?

A. Very steadily and increasing very rapidly, and of course at the expense of the gas business to a great extent.

Q. You were asked also as to a contribution to Employees' Aid Society and the superannuation fund, vacation and sickness charges, and you were asked whether that was not a unique expenditure with you. What is your information in regard to such charges by other companies?

A. In corporations similar to ours, that is almost the universal practice to make provision of that kind.

Q. Where there is an ordinary vacation or where an employee is absent on account of illness for a short period, do you dock him for that?

A. No, sir, we do not.

Q. I want to ask you too, in reference to these expenditures what the effect is upon the character of the employees that you are able to get and the service they render?

A. We believe, and there is no doubt in my mind whatever, that it operates to improve the character and efficiency and service-ability of the company's employees throughout, and we are enabled to have a better grade of men and able to get more work done, as a matter of fact.

Q. In the production of your product, do you consider it then an economical and wise expenditure?

A. Most decidedly, y[illegible]ir.

Q. You gave certain meter prices to Senator Page or Mr. Burr. Did the prices which you gave him include the setting of meters or merely the meters unset?

A. Unset.

1914 Q. Can you state what the assessment of the company was on real estate, including its land and buildings for the year 1904 by the city assessors?

A. In the year 1904 the real estate was assessed at $13,451,000.

Q. That included both land and buildings, didn't it?

A. Land and improvements, yes, sir.

Q. And what did your statement to the city at that time show, made up upon the basis to which you have heretofore testified, taking the land value plus one-half of the plant?

A. Something more than $19,000,000.

Q. After you had these figures given to you in regard to mains, services and plant in 1902, did you make up the report to the local tax assessors and to the State Tax Board on the same basis thereafter?

A. Yes, sir.

Q. With whatever change might occur in the assets meanwhile between the two reports?

A. That is the case, yes, sir.

Q. You were asked in reference to the premium of something over $23,000,000 at which the stock was issued in addition to the premium on $14,322,000 which appears on the books? Is there any record kept from which it is possible to tell just what the amount of that premium is from which you made your statement?

A. Yes, sir, there is, decidedly.

Q. The securities themselves, you said were marked down to par value, however, in the books?

A. The par value of the stock of the Consolidated Gas Company that was issued, yes, sir.

Q. Except $14,372,000?

A. That is the case, yes, sir.

Q. You were asked whether Exhibit 172 before the Gas Commission showed the increase to December 31st, of the property of the company to be $9,431,198.52. Does that include any increases of materials or supplies or cash or is it merely an increase in
1915 respect to the items shown in that exhibit?

A. That is the case. What we would term "plant" only.

Q. There are no materials and supplies or cash or accounts receivable there?

A. No, sir.

Q. And is the same true as to the $9,693,565.90 which appears in Exhibit 89 on this hearing?

A. Yes, sir. That is the case.

Q. And in addition to this $9,693,565.90 was there not a further addition to those items between June and November, 1884, of $196,419.01?

A. That is the case; yes, sir.

Q. The counsel for the city has offered in evidence as City's Exhibit 31, page 776 of Senate Document 47 of 1886, including the column headed "Cost of Property." Do you know at what figure the plants of the Manhattan Company were carried into that "Cost of Property"?

A. My recollection is that it was about $64,000.00.

Q. That is the plant at 18th and at 14th Streets?

A. 18th and 14th Streets. Those plants have a capacity of about seven million cubic feet per day combined.

Mr. PAGE: On what does he base that statement of his that it is carried in that figure?

Mr. MATHEWSON: On the same report.

Mr. PAGE: He certainly does not, because that report states it entirely differently.

Mr. MATHEWSON: No, I think not.

I offer in evidence the report of Messrs. Robinson & Murphy, constituting a majority of the Senate Committee of 1886, from Senate Document 47 of 1886, page 776, of which has been offered by the city.

Mr. BURR: I object to it being offered in that incomplete way, because the report of the majority refers to its agreement with
1916 the conclusion arrived at by the minority, Senator Gilbert, and if it is going to be offered in evidence at all I insist that the whole report shall be offered.

Mr. MATHEWSON: I offered the report of the majority of the committee.

The MASTER: Well, I will take it.

Mr. BURR: Will you take the offer in evidence of the whole report?

The MASTER: I will take the whole report, yes.

Mr. MATHEWSON: I object to his offering the whole of that report in connection with my examination.

The MASTER: We might as well take it while we are on the subject.

Mr. MATHEWSON: All right, sir.

The portion of the report offered by Mr. Mathewson is received in evidence and marked Complainant's Exhibit 227.

The portion of the report offered by Mr. Burr is received in evidence and marked City's Exhibit 45.

Q. What was the date of the first session of the Stevens Committee, the joint legislative committee of 1905, and when was the last public sitting?

A. The first was on March 30, 1905, and the last on the 21st of April, 1905.

Q. Referring to the assessment of $31,900,000 for the company's special franchises for the year 1906, you were asked in reference to the order fixing the price of gas at 80 cents. It appears that the order was made February 23; did the company receive any notification before or after that date of such a tax?

A. Two notices, both subsequently to February 23d; the first one being dated March 1st, 1906, advising the company that the
1917 Board had made an assessment upon the special franchises of the company, fixing the value at $31,900,000, and a second notice dated March 28, 1906, advising us of a final assessment of the same amount, $31,900,000.

Q. The first notice invited the company to make objection if they had any to make to the assessment before it was finally fixed?

A. Yes, sir.

Q. Did the company appear thereafter by counsel?

A. It appeared by counsel.

Q. And the final assessment notice of March 28th followed.

A. Yes, sir.

Q. Is there any method by which you can distribute your distribution or general expenses over the various plants, apportioning them at so much to each one?

A. No, sir; except by an arbitrary method that would simply deal with the general ratio of the sales to the make, applying it to the different stations, but the results would not be particularly satisfactory and would not indicate actually the results in connection with each plant.

Q. Referring to the exhibits relative to the franchises of the company, beginning with the exhibit, grant to the New York Gas Light Company, and concluding with the State grant of 1871, which were offered in evidence here, in whose custody have those been since the company was formed in 1884?

A. In the custody of the secretary of the company.

Q. Had they come into the hands of the Consolidated Gas Company from the constituent companies at that time?

A. They did, yes, sir.

Mr. BURR: I submit he cannot testify that they came into the custody of the secretaries of the company and that they remained with each secretary for all the years from 1884, prior to the time he became secretary. He might testify for himself, but certainly
1918 he cannot testify positively to the possession of them by other people years ago.

Q. Were they in the files of the secretary when you became secretary?

A. Yes, sir.

Q. And what is your information as to them before that time?

A. They have always been in the files of the company since consolidation.

Q. Exhibit 143 before the Gas Commission has been offered here as City's Exhibit 41. Will you find the exhibit in that volume?

A. I find the Exhibit 43 in the printed record before the Gas Commission.

Q. That you stated was a copy of memorandum which you had, a comparison of certain items of cost, one month as compared with the corresponding month the preceding year?

A. That was the case, yes, sir.

Q. Now, did you state before the Gas Commission that that was not a complete statement of cost?

A. I did, yes, sir.

Q. Does the 14th Street station, for instance, have they any items indicating the cost of oil or the oil gas at 21st Street which enriches the gas?

A. No, sir, neither 14th Street nor 21st Street have that cost included.

Q. So that that exhibit is to be taken as a supplementary comparison and not as complete?

A. That is the case, yes, sir.

Q. Now, taking Exhibit 147 of the Gas Commission, which is City's Exhibit 42, certain prices are given there for meters. Is that the price for meters set or meters delivered to the company?

A. This is the price for meters delivered to the company.

Q. How about Exhibit 148?

A. It is the price delivered and does not include the connections.

Q. You were asked in reference to the payment by the
1919 Standard Oil Company representing an adjustment between the rates of a previous contract and the rate of a subsequent contract for oil at a lower figure. Does that payment operate to reduce the cost of material or the amount of material for that year?

A. It does, yes, sir.

Q. So that in making up the cost of gas the material that went into the cost would appear with that $119,000 deducted, would it?

A. Deducted, yes, sir.

Q. Are you familiar with the employees of the accounting department, the general office of the company, and with their salaries or compensation?

A. Perfectly.

Q. Who employs them?

A. A great many of them I employ myself.

Q. Are any men employed there whose presence is not necessary to the work of the company?

A. Not one.

Q. How about their compensation?

Q. It is at as low a figure as we can secure the kind of help that we have got to have to do the work and do it properly and correctly.

Q. You have general charge of the books of the company, have you not?

A. Yes, sir.

Q. The vouchers for money paid, etc.?

A. Yes, sir.

Q. I want to ask you generally whether there are any expenditures made by the company for labor and material, so far as you know, which are not required?

A. Absolutely none.

Q. Or for which a higher price is paid than is necessary?

A. In no case.

Q. Has the company many customers of small means or small consumers?

A. A very great many, yes, sir.

Q. Are there any actions pending against the company for penalties on account of this pressure law?

A. There are actions pending at the present time to recover
1920 penalties under the law fixing the pressure at which the company shall carry the gas in the mains, aggregating, as far as I am able to find out at the present time, $46,000. There are two actions, one of September, 1905, and one of January, 1906, where no sum was named. In two other actions, one of January, 1906, and February, 1906, penalties aggregating $46,000 are named.

Q. Do you know how many customers the company has?

A. About 390,000.

Q. And if the company were to make a charge at higher than 80 cents to each one of those and be subject to a thousand dollars penalty for each offense, how much would that make per month?

A. $390,000,000.

Q. And how much in a year?

A. $4,600,000,000.

Q. How many stations are tested for pressure by the city, do you know?

A. How many gas stations?

Q. Yes.

A. All of them as I understand.

Q. What would the penalty be at a thousand dollars a day, for pressure, assuming that the pressure should vary outside of from one to two and one-half inches each day.

A. $5,000 a day.

Q. How much would that be a year?

A. $1,800,000 a year.

Q. What is the amount of loss per day in your gross revenue if the price of gas is reduced from one dollar to 80 cents, generally speaking?

A. About $2,600,000 in round figures.

Q. A year?

A. A year, something more than that to be exact.

Q. According to statements presented, over 50 per cent. of your net income?

A. Over 50 per cent. of our net income, yes, sir.

Mr. PAGE: You qualify that as Mr. Mathewson did "According to papers presented here?"

1921 Mr. MATHEWSON: I assume that he would have to act on those. As a matter of fact it would be about 75 per cent.

Q. You were asked by counsel whether you concurred in the opinion of Messrs. Walton Clark, Emerson McMillan, Allen B. Forbes, Charles S. Fairchild, Frank A. Vanderlip, Horace J. Morse and N. Wetmore Halsey, as expressed in their affidavits upon the motion for injunction herein.

Mr. PAGE: That is objected to on the ground stated when the same question was put before.

The MASTER: He has not asked any question yet.

Q. Have you those affidavits before you, and will you point out the portions of each affidavit expressing the opinion in which you state concurrence.

Mr. BURR: I object to that; that is not the way to get the evidence of these gentlemen into the record.

The MASTER: I sustain that, as I did before, with the statement that he can offer the affidavits if he wants.

Mr. MATHEWSON: I will offer that portion of the affidavit after he has identified it.

Mr. PAGE: I object to it on the same ground as stated when this line of examination was taken up by Mr. Mathewson before, and I

call attention to the fact that he is threshing over old ground that has been gone over several times by myself and Mr. Burr and the rest of us, and is consuming time.

Mr. MATHEWSON: I did not begin this.

The MASTER: I sustain the objection.

Mr. MATHEWSON: I will ask him to point out the portions; is that sustained?

The MASTER: That is sustained.

1922 Mr. BURR: That is the same objection I made before.

A. On page 52 of the affidavits and notice of motion, the affidavit of Walton Clark, beginning "as a result of my experience" and ending "the investment in new gas works in New York City."

Q. Whose affidavit is that?

A. Walton Clark's.

On page 54, paragraph 5, the affidavit of Emerson McMillin, beginning "I am fairly familiar with the market value of the stocks and bonds of gas companies," and ending on page 57, with the words "special hazards hereinbefore referred to."

On page 59, in the affidavit of Allen B. Forbes, beginning with the first line of paragraph 6, where it says "in the case of gas and electric companies," and ending on page 60, the end of the affidavit, finishing with the words "taxes and other fixed charges."

Page 61, affidavit of Charles S. Fairchild, beginning paragraph 2, "I have read the affidavit of Allen B. Forbes," and ending on page 62 with the words "property of the company engaged in the business."

Page 63, affidavit of Frank A. Vanderlip, beginning paragraph 2, "I have read the affidavit of Emerson McMillin" &c., and ending on page 64 in the same paragraph with the words, "of the company engaged in the business."

Page 69, affidavit of Horace J. Morse, beginning with the second paragraph, "I have read the affidavit," and ending on the same page, "property of the company engaged in the business."

Page 71, beginning with paragraph 3, affidavit of N. Wetmore Halsey, beginning, "I have read the affidavit of Allan B. Forbes herein," and ending on page 72, the middle of the same paragraph, "of the company engaged in the business."

1923 Q. Were those the opinions in which you stated you had no hesitancy in concurring?

A. Yes, sir.

Mr. MATHEWSON: I offer those portions of the affidavits referred to in evidence.

Mr. PAGE: Objected to as incompetent, irrelevant and immaterial, and an improper way to prove the statements made by those persons, and further, if their opinion or testimony is to be received, it should be brought here and be subject to cross-examination.

The MASTER: I do not understand that they are offered for that purpose and they are certainly not received for that purpose, and in admitting them I do not admit them as proof of the facts contained in them. I admit them as part of the redirect-examination of this witness and for the purpose of explaining or qualifying statements

that he may have made on his cross-examination, when his attention was called to these documents by the cross-examining counsel. That is the only purpose for which they are admitted.

Mr. BURR: I join in that objection.

Mr. PAGE: You will remember that on cross-examination the State objected to questions asked on cross-examination by the District Attorney.

The MASTER: That is the difficulty of having two counsel on the defendant's side of the case.

The objection is overruled.

Exception *to* Senator Page and Mr. Burr.

The portions of the affidavits identified by the witness are received in evidence, collectively, as Complainant's Exhibit No. 228.

Mr. MATHEWSON: I have here a statement of the price at which gas was sold for each year all the way down. I think Mr.
1924 Burr asked for it at one time and I did not have it. You will remember that it was put in as to the amount of sales, but not the price each year. Is not that so, Mr. Carter?

The WITNESS: Yes.

Q. Have you a statement of the average rate per thousand received for gas by the company from its formation in November, 1884, to 1905, inclusive?

A. Yes, sir.

Q. It is already in evidence for 1905, and some of those other years, is it not?

A. Yes.

Q. And what were they?

A.—

Year.	Rate per M sold.
1884	$1.6854
1885	1.6976
1886	1.4642
1887	1.2589
1888	1.2566
1889	1.2563
1890	1.2568
1891	1.2555
1892	1.2549
1893	1.2547
1894	1.2550
1895	1.2552
1896	1.2556
1897	1.2213
1898	1.1518
1899	.8456
1900	.8246
1901	.9994
1902	1.0004
1903	1.0006
1904	.9998
1905	1.0202

1925 Q. The sales year by year of the Consolidated Gas Company appear, do they not, in exhibit Complainant's 85?

A. Yes, sir.

Q. Have you prepared a statement of the same character as that delivered to the Gas Commission, showing the cost of gas of the Consolidated Gas Company's own make and of that received by it from other companies for the four months July, 1905, to October 31st, 1905?

—. Yes, sir.

Mr. MATHEWSON: I offer it in evidence.

Received in evidence and marked Complainant's Exhibit 229.

Recross-examination by Mr. PAGE:

Q. Can you give the exact amount by which your surplus was depleted, or in other words how much the dividends in 1899 exceeded the amount of earnings properly applicable to dividends?

A. I did not give the exact amount. I can furnish you with that. I testified that the deficit for the year 1899 was something approximating $700,000, and for the year 1900 something over $1,000,000. If you would like those figures exact I will prepare them for you.

Q. I would like to have them for those years. In 1899 you paid a dividend of 5½ per cent., and in 1900 a dividend of 6 per cent, did you not?

A. Yes, drawing upon the accumulated surplus for that purpose.

The MASTER: If there is to be any cross-examination of Mr. Carter for any appreciable length, under the direction of the court we will have to defer it and take the next witness on the direct. If you have only a few questions we might as well go on and complete with Mr. Carter.

Mr. PAGE: I will suspend with Mr. Carter.

1926 Mr. BURR: Mr. Mathewson covered a great deal of ground with Mr. Carter and he has made some very positive statements on which it will be necessary for us to cross-examine him, but in view of the order made, and the ruling, I shall not cross-examine him now.

The MASTER: Have you another witness, Mr. Mathewson?

Mr. MATHEWSON: Yes, but I am afraid you will be without a witness early in this afternoon.

COLIN C. SIMPSON, recalled and further examined, testified as follows:

Redirect examination by Mr. MATHEWSON:

Q. You stated that pipe in 1885 for mains was lower than in 1905. How was it in 1884?

A. Very much higher.

Q. Do you know whether at times prior to 1884 pipe was higher still?

A. Very much higher still.

Q. As high as what?

A. $60 a ton.

Q. Did you give Mr. Carter any figures in reference to services in the tax report?

A. I did not.

Q. What would you say, as to the valuation for services, $600,000 or thereabouts, services of the Consolidated Gas Company, as they appear in the tax reports?

A. It is an absurd figure.

Q. Did they come from the engineering department at all, as far as you know?

A. No, sir; they did not.

Q. You have already testified as to the value of mains?

A. I have.

Q. Can you state what the value of the mains as material only would be at this date, unlaid?

A. Yes.

1927 Q. How much?

A. The value of the pipe specials and lead which comprise the mains, leaving out the yarn or anything of that kind, or blocking, or valves would approximate $4,300,000; over $4,300,000.

Q. That would be without any laying at all, even in soft dirt.

A. Without any laying at all.

Q. You have seen the figures of the tax report, have you not?

A. I have.

Q. Does that in any way modify your testimony as to the value of mains to-day?

A. Not one bit, sir.

Q. Mr. Carter stated that the figures were handed to him in reference to mains in 1902. Is that your recollection?

A. Yes.

Mr. BURR: I would like to ask him one question because of my personal solicitude about the matter.

By Mr. BURR:

Q. Since you were here last, have you heard anything as to the whereabouts of those poor, abandoned mains that you set adrift without a chart or compass?

A. I could tell you, if you want to know, in a general way, where they are. There are abandoned mains probably on 33 per cent. of the streets of Manhattan—from 25 per cent. to 33 per cent. It might not be an entire block; it might be a piece of this block and a piece of that block. Those mains range in size anywhere from an inch and a half to even some twenty inches. For instance, there is a 20-inch main on Eighth Avenue, from 59th Street to 65th Street; that is under the car tracks and cannot be reached; it has to be abandoned.

Q. In other words, they have gone to pieces?

A. No, they have not gone to pieces. The material is there. I suppose they would have to be looked after if you wanted to use them.

Q. Does that make up the 70 miles above the 822 miles
1928 that you have testified to?

A. The different abandoned mains scattered all over Manhattan make up that 70 miles.

By Mr. MATHEWSON:

A. I understand that none of the abandoned mains are included in the 822 miles of mains about which you have testified as to values?

A. Not one inch of them.

The MASTER: Any cross-examination of Mr. Simpson.

Mr. BURR: I have no questions to ask further than that.

The MASTER: Any cross-examination, Mr. Page?

Mr. PAGE: Yes, I have some cross-examination that I suppose will have to be reserved under the rules.

Mr. MATHEWSON: Can he not complete with the cross-examination of Mr. Simpson? He has been down here several times.

The MASTER: If it is not very long I suggest that it be completed.

Mr. PAGE: I am going to submit to the ruling of the judge.

The MASTER: If you will state whether your cross-examination is lengthy or not I will take the responsibility of disposing of it.

Mr. PAGE: My cross-examination will be somewhat lengthy.

The MASTER: Then we will go on with another witness.

1929 ALEXANDER C. HUMPHREYS, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside, Doctor?

A. New York part of the year, and part of the year in Glen Cove.

Q. Are you a graduate of any engineering institution?

A. The Stevens Institute of Technology.

Q. Do you hold any position with relation to that Institute now?

A. President.

Q. How long have you been president?

—. Since 1902.

Q. Have you ever been engaged in the gas business in any authoritative position?

A. I have been so engaged since the year 1872 continuously.

Q. Will you state what your first connection with that business was?

A. I entered the business as secretary and treasurer of the building committee of a suburban company; the next year, upon the completion of the works, I was made secretary and treasurer of the company; the next year I was made superintendent in addition. A couple of years later I appreciated that I needed a technical education to enable me to go as high as I wanted to go, and entered the Stevens Institute as a freshman in 1877, carrying on my work for the gas company at the same time and carrying on work at the Stevens Institute chiefly by night study, graduating in 1881. At the end of 1881 I was made chief engineer of the Pintsch Lighting Company, now succeeded by the Safety Car Heating and Lighting Com-

pany, and in that position I had charge of the building of their oil gas works, and the fitting of cars, steamboats, light houses, buoys, to light them with compressed oil gas delivered at high pressure and governed to the burner pressure by special devices. In that connection I made a special study of candle powers and pressures. In 1885, the first of the year, I was made superintendent of construction of the United Gas Improvement Company, Philadelphia, at that time the operator of about ten works scattered throughout the country. Three months later I was made general superintendent, and given control of the operation of the works as well as construction. Then, the next year or so, about 15 works were added to my list. Within a year or two I was given control of all the commercial details, and in that position I had charge of the developing of a uniform system of accounts under which the United Gas Improvement Company operated and practically operates to-day. In 1892 I organized the firm of Humphreys & Glasgow of London, to engage in the construction of water gas plants. In 1884 I resigned from the U. G. I. and organized the firm of Humphreys & Glasgow of New York, to engage in the business of consulting and supervising engineering for gas companies, advice as to the management of gas companies, and to take up the management of gas companies and I have been continuously engaged in the affairs of those two firms since 1892 and 1894 respectively.

1930

Q. When you were general superintendent of the United Improvement Company, what general duties did that cover?

A. It covered the entire engineering of all the works under the control of the company and all the commercial details of those companies up to the time the reports were carried into the main office at Philadelphia; and also for the last five years, which I forgot to mention, covered the charge of the contracting department through which the company contracted to build plants for outside companies.

Q. How many plants did the United Gas Improvement Company have at the time you left it, over which you had such control?

1931

A. About fifty.

Q. Had some of those been constructed by the company under your supervision?

A. Some of them, yes, and all of them added to.

Q. Had your firm of Humphrey & Glasgow erected gas plants or gas apparatus on this side of the water?

A. On this side?

Q. Yes.

A. A few, yes, sir.

Q. Have they erected any on the other side?

A. A great many.

Q. Will you name some?

A. Very large plants for the Gas Light and Coke Company, which is the biggest company in London, smaller plants for the Commercial; of London, Manchester, Birmingham, Liverpool, Brighton, Bournemouth, Southampton, Edinborough, Glasgow, Belfast, Dublin and many more in Great Britain. On the other side of the channel, Utrecht, Rotterdam, Brussels, Berlin, Vienna, Budapest. Going

much further, Shanghai, Sydney, Australia, Dunedin, New Zealand and not less than 125 in addition.

Q. What proportion, if you happen to know, of the water gas plants outside of the United States, that is, in the rest of the world, has your firm constructed?

A. I don't remember figuring it up of late, but I should think from my general knowledge, 75 per cent.

Q. During the past 20 years, in addition to your practical experience in the gas business, have you made any study of economic questions involved in the conduct of the gas business?

A. I have.

Q. And of gas accounting and depreciation?

A. I have made a special study of those subjects.

Q. And of capital and interest returns?

A. Yes.

Q. Are you connected with any engineering societies, doctor, and will you waive modesty and state some of them?

1932 A. Well, I ought to put at the head of the list, I suppose, although I am an American now, the Institution of Civil Engineering of Great Britain; The American Society of Civil Engineers; The American Society of Mechanical Engineers; The American Institution of Mining Engineers; The British Association for the Advancement of Science; American Society for the Advancement of Science; American Chemical Society; Society of Chemical Industry of the World, American Gas Light Association, of which I am a Past President; Western Gas Association; New England Association of Gas Engineers; Pacific Coast Gas Association; Ohio Gas Association; Society of Gas Lighting of New York, and some others; I don't remember them all.

Q. Are you familiar in general with the plants of the Consolidated Gas Company in the City of New York?

A. Quite familiar with them, yes, sir.

Q. Have you ever examined them?

A. I have.

Q. Did you examine them for the purpose of making an estimate of value?

A. I did.

Q. How recently did you make that examination?

A. My personal examination was back last winter, somewhere around Christmas, to my recollection. I have had an examination made since by proxy, an exhaustive one.

Q. By your office?

A. By my staff under the charge of my chief engineering assistant, that is, the chief engineering assistant in the New York firm.

Q. Are you familiar with the provisions of Chapter 736 of the Laws of 1905, and of Chapter 125 of the Laws of 1906 of the State of New York, providing that the pressure in the "service mains" of the company shall never be less than one inch or more than two and a half inches?

A. Yes, sir.

Q. What is your view as to the possibility of complying with that provision?

A. Practically impossible.

1933 Q. As to ammonia and sulphur provision. Is it possible to operate plants indefinitely, taking coal which you have to get and always keep within those requirements?

A. Why, I suppose it would be possible with human nature strung up to the very finest point, but I don't think in practice we would ever find a company running without some failures, and especially in a time of stress, where they had to get a coal which was rich in sulphur compounds, outside of sulphuretted hydrogen. Of course the penalty is a very severe one.

Q. What is your estimate and judgment as — the value of the plants of the Consolidated Gas Company which are located on Manhattan, including manufacturing plants and holders?

A. I did not attempt in the time at my disposal to come down to a specific figure, I thought it better to endeavor to see whether I could find any fault with the book figures, as I recall about sixteen million, eighty thousand odd dollars. My examination satisfied me that that was a reasonable figure. When I say reasonable, I mean that is a figure less than the value at the time, taking into account depreciation.

Q. What would be your estimate of the value in such round figures as you could make it, less such depreciation as you observe?

A. Do you mean now, at the present time?

Q. Yes.

A. With the figures that are before me from this examination that my firm has made, I should say that it was considerably above the book value. Those figures are not entirely completed owing to my chief engineer being called off on an emergency, at one of the works, for which we are responsible, a very severe emergency. The figures have not been completed, but they have been completed sufficiently to satisfy me, and I should be entirely willing to testify under

1934 oath, as I am, that the present value, allowing for depreciation, is not less than $16,400,000, probably in excess of that.

Mr. PAGE: Do I understand this is the plant and holders?

Mr. MATHEWSON: Yes.

Q. Assuming that an engineer after careful examination of details, had testified that the value was $17,100,000, what would you say to that figure?

A. If an engineer had done so?

Q. Yes.

A. I should want to know who the engineer was and a good deal about it; there is a very personal equation in such an estimate.

Q. Would that be a figure which would conflict with your views, so far as you had gone?

A. No, I think it is entirely possible that the very complete continuation of my figures would bring the figure very close up to that because I am extremely conservative in stating the amount I have.

Q. Assuming the sales of the Consolidated Gas Company for the past year to have been over 13,000,000,000 feet, and their receipts to have been over $13,000,000, and with the number of plants that they have, and as you know them, what would you consider a fair

allowance for working capital, including cash accounts receivable and equipments and material?

A. About 30 cents per thousand cubic feet of annual sales.

Q. And at 13,000,000,000 feet, that would amount to about $4,000,000 wouldn't it?

A. Somewhere around $4,000,000.

Q. What is meant in the engineering profession by undistributed expense in connection with contracts?

A. In connection with contracts?

Q. Yes.

A. The items of expense that are not readily apportioned to each individual plant, each individual contract, and which would
1935 come under the head of general expense; perhaps as the English accountant would put it, establishment charges.

Q. In figuring the final cost of the plant, is it necessary for the company to add any percentage for undistributed expense and engineering expense in addition to what it paid for contractors and installing its property?

A. Certainly it is.

Q. What would be the fair figure for that?

A. About 10 per cent. is the figure I have used.

Q. And how about interest?

A. It would depend upon the time to be estimated that the construction would take. Of course if it was two years, we would charge 5 per cent. and one year 2½ per cent.

Q. Taking the plants and holders of the Consolidated Gas Company as you know them, would you consider two years as an excessive period?

A. I certainly should not.

Q. Is there an item of undistributed expense also to be computed by contractors who install apparatus?

A. Certainly, on the same principle.

Q. And what would be a fair figure for their undistributed expense and engineering, according to your experience?

A. I could not generalize very safely on that, because it would entirely depend on the system of accounting followed by the concern. Of course the concern should, if possible, itemize on the different special items, different special contracts or whatever it might be and leave as little undistributed expense as possible. I can say as an example in my own firm in London where we do nothing but a contracting business and do not get any profits that do not come from contracts, the average since 1892 is a shade under 16 per cent. The accounting is under the direct charge of Spain Brothers & Company, some of the best accountants I suppose in England, and has been from the start, and that is the result of their and our effort to spread on each contract as much of the general expense as they can
1936 possibly figure for that particular account, and still it leaves somewhere between 15 and 16 per cent.

Q. That is after a distribution of all the items upon special contracts which the accountants could distribute?

A. Yes.

Q. How about the profits of a contractor, is that to be included in the cost of the contractor?

A. We hope so.

Q. And what per cent. would be fair for that, would 15 per cent. be excessive?

A. I should not like to talk from my own experience on that, but I should not consider 15 per cent. excessive.

Q. Taking a plant which has been built up, one plant or one section at a time, beginning, say, with 1825 up to date, is it possible to build such a plant in that way upon exactly the same lines which it would be constructed if it would be reproduced new to-day in toto?

A. Certainly not, it is a case of foresight and backsight.

Q. If you had benches of sixes working efficiently, would it in your judgment be wise to throw out the sixes and put in nines if they were in good condition?

A. Certainly not.

Q. Assuming that the Consolidated Gas Company had sales of 13,300,000,000 feet per annum, and that they were able to produce in their manufacturing plants only something over ten and one-half billion feet or less, would it be your judgment that it would be wise or otherwise to establish a plant for the purpose of taking care of the balance of their output?

A. I should think it would be wise to do so.

Q. Are you familiar with the situation at Astoria?

A. Fairly so.

Q. Assuming that the Astoria Light, Heat & Power Company were established for the purpose of manufacturing for the Consolidated Gas Company the balance of its gas sold which it cannot now
1937 manufacture in its own plant, what would be your judgment as to the computation of the investment at Astoria in the capital account of the company for the purpose of determining the selling price of gas?

A. Who would own the Astoria Company?

Q. The Consolidated Gas Company owning all the securities of every kind and using it as a manufacturing station?

A. Certainly, the capital belongs there just as much as the Manhattan plant does.

Q. Assuming that it organizes the National Coke & Coal Company and owns all the capital of that company for the purpose of carting its product, its coke, and selling it, thereby making a more economical arrangement than when it carted its own coke or hired outside contractors; and that the Consolidated Gas Company owns all the securities of the National Coke & Coal Company, would that in your judgment come in the same category as the Astoria Company?

A. Providing the company turned its profits into the gas company, which of course it would have to under the ownership of stock.

Q. Would it in your judgment be wise, Doctor, for the Consolidated Gas Company to wait until its output had reached the complete limit, before it established a plant to take care of increase, or began the construction of such a plant?

A. Certainly not. They ought to be turned out of office if they did.

Q. Are you familiar with the effects of electrolysis on gas mains?

A. Fairly so.

Q. Are you familiar with the conditions in New York, so far as relates to the use of electricity by the subway, the trolleys and the elevated, and the increase in currents?

A. Fairly so. I do not pretend to be an electrical expert, but am familiar with those conditions in connection with the gas business.

Q. From your knowledge and observation, Doctor, what would you consider as to the danger of whether there is any danger
1938 in the future through electrolysis to the pipes of the company in the streets of New York City?

Mr. PAGE: I object to that on the ground he has not laid the proper foundation to qualify this witness to give any such testimony.

Mr. BURR: Under the order which has been made here by Mr. Justice Lacombe, I notice that we are required to allow these witnesses to proceed without interruption. Does that mean that we are not to object or be permitted to object.

The MASTER: I don't remember any such provision, Mr. Burr.

Mr. BURR: It is very clearly stated in the order that these witnesses are to be permitted to testify without interruption.

The MASTER: I do not so construe it. You can object.

Mr. BURR: Well, I object on the ground it is apparent that this gentleman disavows any claim to be an expert on this particular matter of electrolysis and is not competent to testify in that regard.

The MASTER: I will let him answer.

Mr. Burr and Mr. Page except.

A. May I enlarge upon my statement as to qualifications, Mr. Master?

The MASTER: Yes.

Q. Yes.

A. I do not pretend to be an electrical expert: I do know about the effect of electrolysis and have suffered from it as a manager. I was one of the first to observe it in Atlanta, where the pipes were very severely injured, and the joints also. I experienced the
1939 same thing in Syracuse, and had electrical measurements made for me to satisfy myself that the trouble came from electrolysis. There is not the slightest question of course that electrolysis is to be found all over the United States, injuring the pipes of the gas companies and water companies. I have made myself familiar with it by study, but I repeat, I don't pretend to be an electrical expert in the sense that I am a gas expert but I believe myself entirely qualified to take the ground that electrolysis is a very grave danger, although I do not believe to-day that it has done any great harm to the New York pipes. It is simply a danger, that is my position.

Q. How would that danger be affected by the increase in subways and the electrical currents which follow from them and the general installation of electricity in traction which has taken place very recently in New York?

Mr. PAGE: Objected to as purely speculative.

Mr. MASTER: It seems to me that is a deduction anyone can draw, in view of the statement he has already made, is it not?

Mr. MATHEWSON: Perhaps it is, if the Master thinks so, I will not press it.

The MASTER: If a little electricity is bad, a great deal more will be worse, will it not?

Mr. PAGE: He says it has not been very bad in New York and it would be speculative as to what——

Mr. MATHEWSON: I will not press the question in view of the Master's suggestion.

The MASTER: You can press it and have the objection sustained and the question answered if you like.

Mr. MATHEWSON: No.

Q. Have you bought and sold gas plants, doctor?

A. I have—wait a minute, sold? Yes.

1940 Q. Have you appraised them for other people?

A. That has been probably 50 per cent. of my work since 1894.

Q. Have you appraised many in that way?

A. Yes sir, a good many. I appraised all the works with one or two exceptions that were taken in by the United Gas Improvement Company from the time I was general superintendent. The directors insisted upon a report from me before they entered into negotiations or before they concluded them.

Q. Do you know whether or not the fact that a business is established and that it has connections with consumers and is operating enters into the value of the business in appraisals or sales or purchasers?

Mr. PAGE: I object to that question on that ground that while such elements may enter into the appraisement for purchase or sale, those elements cannot properly enter into an appraisement for the purpose of establishing the price that the public should be charged for gas.

Mr. BURR: Same objection.

Mr. MATHEWSON: The cases as we understand them, and when we come to argue the law we will present them, hold that such an element must be taken into consideration in establishing the capital upon which the company is entitled to a return.

Objection overruled.

Mr. Page and Mr. Burr except.

A. Very largely.

Q. Assuming, Doctor, that in 1884, six gas light corporations operating in the City of New York, were consolidated, forming the complainant company, the Consolidated Gas Company; that one of the constituent companies was incorporated in 1823, and was

1941 in operation from 1825 up to 1884; and that the other five were incorporated at intervals prior to the consolidation in 1884; that the output of the six companies in gas in 1885 was about 3,942,000,000 feet and that the output has increased until in 1905 it was 13,283,000,000 feet or thereabouts; that the population of

Manhattan Island, on which the Consolidated Gas Company is operating, is over 2,100,000 people; that it shows an increase of something like 50% in population in the last 30 years or so; that the Consolidated Gas Company has about 390,000 consumers, and is in active operation to-day, what would you consider to be the value of the good will of that business, including the value of the established business, and its connections with consumers and other elements which go to make up good will as distinguished from its tangible plant.

Mr. BURR: That is objected to as incompetent, irrelevant and immaterial.

Mr. PAGE: Objected to as incompetent, irrelevant and immaterial, and for the reason stated in the objection to the last question.

The MASTER: Any question of franchise against the public is not material?

Mr. MATHEWSON: I did not include that. The relations between the company and its consumers.

Objection overruled.

Mr. Page and Mr. Burr except.

A. I should estimate it at not less than $7,500,000.

Q. What rate of return in your judgment and experience is the company entitled to upon the amount of its investment in the gas busines-.

Mr. PAGE: Objected *on* on the ground that it is calling
1942 for this witness to usurp the functions of the court.

Mr. MATHEWSON: I do not think so.

The MASTER: Well, gentlemen, there may be a very serious question about that kind of evidence, but I see the affidavits presented to the court on the injunction proceedings cover that ground to some extent, and I am going to allow that evidence.

Objection overruled.

Mr. Page and Mr. Burr except.

Question repeated as follows: What rate of return in your judgment and experience, is the company entitled to upon the amount of its investment in the gas business? Companies of this character, located as this company is?

A. In my opinion, the question of return and rate of capitalization are interwoven. I think that the original investors up to the time the business is fairly well established are entitled to 10%, and the final average must be made up on the basis of what the new capital can be brought in at in view of the natural hazards, and as a rule you figure out that on capitalization of say 3 to 3.75, the company should be allowed a return of about 10%.

Mr. PAGE: To get it a little clearer, will you get him to state what the 3 to 3.75 is?

Q. What do you mean by 3 to 3.75?

A. I mean that the amount of capital on the thousand of annual sales, for instance $3.50 per thousand of annual sales.

Q. When you speak of the good will of this company, as in your

judgment worth $7,500,000 upon the basis which I have indicated, you mean the good will assuming that the company is en-
1943 titled to sell gas at that price, or to make that return?

A. That it is entitled to sell gas at $1.00, that it would be protected in its rights by the courts to sell gas at a dollar and to make a return of 30 cents a thousand to cover profit, and the burden of capital generally.

Q. Is 30 cents a thousand in your experience an excessive allowance for return on capital?

A. It is not, no.

Q. Have you from the figures presented in this hearing prepared a statement of what you consider should be charged to the operating cost of the production of gas in favor of the Consolidated Company?

A. I have.

Q. For the year 1905?

A. I have.

Q. Will you present it, please?

A. Am I at liberty to read it the way I have prepared it?

Q. Have you other copies of it?

A. I have.

Q. How many have you there?

A. Two more.

Mr. MATHEWSON: We will hand a copy to each of the counsel and they can follow it as you read and you can simply make the statement on the record as Mr. Addicks did. I think you might read it so the Master can hear the method followed by you.

A. I consider first the income, as follows:

Income & Cost per M. as of December 31, 1905.

By Exhibit No. 96:

Gas sales stated as $13,552,482.97; but this includes $565,241.39 for city lamps. The gas consumed in these lamps was taken for the purposes of the contract at an average hourly consumption of three c. f. = 270,779,678 c. f. @ 90¢ = $243,701.71, leaving for maintenance, $565,241.39 — $243,701.71 = $321,539.68. It
1944 is in evidence that an average of 3¾ c. f. was consumed per lamp hour bringing the consumption to 338,474,597 c. f., which at 90¢ would be $304,627.13, and leave for maintenance, including Welsbach mantles, renewals, etc., $260,614.26 against a cost of maintenance of $289,259.09—a loss of $28,644.83. The inclusion of only 270,779,678 c. f. as the amount consumed shows an apparent profit on maintenance of $32,280.59. As it would now greatly complicate the figures for cost per M. to correct for the facts as shown, this statement is made up on the basis of gas consumed at three feet per hour.

Gas sales — nominal — including lamp maintenance	$13,552,482.97	
Deduct amount nominally received for lamp maintenance	321,539.68	
Total Sales 13,283,163 M.....	$13,230,943.29	99.607

Receipts applicable to the gas business but not from sales of gas:			
Maintenance of Gas Lamps.....		$321,539.68	2.4207
Miscellaneous Income:			
Stove rentals	$122,322.60		
Discounts	9,497.57		
Real estate rentals.....	37,408.88		
Sundries	3,481.48		
Dividend—National Coal & Coke Company	5,000.00		
		$177,710.53	1.3378
Total		$13,730,193.50	103.365
Cost & Reserve, as shown next sheet.....			70.947
Gross profit to cover all charges for capital.....			32.418
1945 By Exhibit No. 94:			
Station Cost	$3,455,091.37		
Gas manufactured under agency agreements	997,039.89		¢ per M.
	$4,452,131.26	+ 13,283,163	33.517
Distribution	1,641,092.19	+ "	12.355
General Expenses	2,871,263.53	+ "	21.616
	$8,964,486.98	+ "	67.488
Taxes included $965,843.88, of which $63,222.87, taxes of 3 per cent. on dividend in excess of 4 per cent. and one-half of 1 per cent. on gross receipts does not apply on gas business—$63,222.87.....			.476
			67.012

Now I proceed to deduct certain charges which appear in above amount, and I believe I do what all gas managers who have had experience do, that is, substitute average figures.

Deduct Charges for the year for which are to be substituted average figures as explained in note:

Repairs—Production or manufacturing	$217,319.07	= 1.6360¢

I call attention to the fact that that appears in Exhibit 94, I think it is, as t[illegible] hundred and ten thousand and odd dollars, but th[illegible] was a small amount for repairs which is included in [illegible]e pumping expense or distribution expense, which makes up this little difference of $6,000, so I repeat the amount of repairs ..... $217,319.07 = 1.6360¢
Distribution ..... 474,750.91 = 3.574 ¢

$692,069.98 = 5.210 ¢

Deduct Contingent Expense covering Depreciation and extraordinary hazards, etc., to be covered separately.....1,328,316.37 = 10.000¢ 15.210

Cost at burner exclusive of Repairs, Final Renewals (Depreciation) and contingencies including extraordinary hazards 51.802

1946 Repairs—Average actual expenditures from 1884 to Dec. 31, 1905:

Production (Manufacturing) 3.6412
Distribution 3.9446
7.5858¢

Final Renewals (Depreciation):

Production (Manufacturing) 4.9795
Distribution 1.5797
6.5592¢ 14.145

Total for Repairs & Renewals..... 14.1450¢

(Current and final):

Cost at burner with no reserve as yet included to cover contingencies 65.947
Reserve, as explained in Note..... 5.000

Total Cost & Reserve..... 70.947

Notes.

Reserve:

If the selling price is to be fixed by law and so be beyond the control of the seller, the price should be sufficient to cover an average cost of gas, including the maintenance of the investment at full value and a fair return on the investment, having in view the hazards and chances of the business.

The cost cannot fairly be taken as of any one year even if repairs are taken at the average expenditure for twenty years and the final renewals (to cover depreciation) are estimated on the basis of (averaged) final renewal at end—say in this case—of forty years. There are many contingencies which might not be covered by the pa

twenty years' experience, notably electrolysis and present apparent upward tendency of cost of materials and labor. In addition to this general upward tendency, there is the hazard of strikes at the works and at the coal mines, either liable to increase cost, London Companies have been allowed to cover strike expense, at least in part,
1947 from their so-called "Insurance Fund"—one of the Reserve funds. Fire might cripple the business and even if the works were covered by insurance, the losses beyond the physical destruction might be serious. Explosions are always liable to happen and they are much more liable to happen along the lines of mains since the general use of electricity has let loose stray currents in the streets. Damages to employees and others from accidents. Increased cost liable to be met by the extraordinary activity in turning over the streets in building subways and the like. Expenses through such investigations as the present—the third inside of two years. A very serious hazard is liable to develop from electrolysis. While there is no basis for estimate—for then it could be, as it should, include in the Estimate of Depreciation or Renewals—it is known to all gas and water engineers that this is a present danger. While no man can estimate the loss liable to occur, no man informed on the subject can affirm that even in Manhattan Island this source of loss is not liable to develop.

In view of the facts thus briefly outlined, the company should be allowed to accumulate a reserve until the fund reaches, say, one-tenth of the investment, as in the case of many British companies, and the company further should be allowed to renew this fund if it should be depleted, as in the case of the British companies and recommended by the New York Senate Committee of 1886.

Repairs & Renewals (Depreciation):

There is included for repairs the averaged actual expenditures for 20 years	7.5858
and for depreciation, that is, current and final renewals	6.5592
	14.15c. per M.

1948 The actual expenditures for repairs and renewals for the period from 1884 to December 31, 1905, have been 10.60c. per M. The amount shown in the Gas Commission hearing for a somewhat different period was 10.89c. The amount then added in this statement to cover *final* renewals is only 14.15—10.60 = 3.55c. In this connection it is to be borne in mind that repairs and depreciation (or renewals) are interwoven and should be considered together. The total cost per M. of 14.15 for maintenance—current and final—is not excessive, as can be shown by comparison with other metropolitan companies.

Stove Rentals:

While stove rentals are included as an item of income per M. sold to offset charges now applicable against that item of additional in-

come, it is to be noted that if the rental system should be abolished for any reason, the expenses now appearing against that item might very probably continue as an expense and thus represent additional cost per M.

Now shall I go into any explanation of how I got at my depreciation item, or leave that? I can give it in just a moment, the idea of it.

Q. If you think it is essential to an understanding of the situation you may give it.

A. I take the depreciable value of the property, and in my experience as a gas engineer I don't take any fixed per cent. from the text books and authorities, but I take my own judgment as to what should be the life taken for the final renewal of the plant. In estimating that final renewal—for instance, take rather a glaring case: I would not state as has been sometimes stated that I have, that a cast iron main only lasts fifty years or forty years or what-not, but in forming my estimate of the life of the plant I take into ac-
1949 count that very likely anyone particular piece of good cast iron pipe if laid in the street in fairly good soil, not interfered with, and left there undisturbed might last for a hundred or one hundred and fifty years. I have seen it at the end of fifty years perfectly good, if undisturbed. My estimate therefore is not made up on the exhaustion of the plant by actual rust or by anything of that kind, but what I believe, all things considered, the life of the plant, when the plant will have to be renewed by reason of exhaustion of life. In this case I have taken what figures out to be almost exactly forty years and I take 2½ per cent. therefrom as the right amount for forty years, and I take 2½ per cent. on the depreciable property, and having found the amount I divide it by the amount of sales and show a cost per thousand as we have in this statement.

I would like to say one word as to why I take 2½ per cent. instead of going to my interest tables and arriving at a theoretical amount of 1.05 per cent. for forty years; 1.05 put away in a depreciation fund to accumulate at 4 per cent. If that was put away in a depreciation fund the company would be deprived of its use. I prefer to consider the case exactly as we do in the gas business. We do not put that money away in a depreciation fund except in very rare cases, but we put it back into our business and use it in lieu of bringing in to that extent additional capital for extension of business. The theory on which I work is based upon the fact that that money, that depreciation fund, reinvested, if the business is prosperous, will at least return us 4 per cent. and therefore the additional returns from the depreciation amounts as expended will pay for the difference between the 2.5 and the 1.05. In other words, the load upon the business is the same. In one case you would have a less amount charged for depreciation and a greater
1950 load of capital and in the other case you have it all centered upon the load of depreciation.

Q. I see, Doctor, that Mr. Addicks in his estimate has an estimate to increase the quantity of oil or the price of oil and figures it out to 1.83 cents, and also averages the price of labor and finds that

.78 of one cent should be added for that and perhaps one or two other items of that kind. Those as I understand are all included in your 5-cent contingent item?

A. Yes, they must be, because I haven't any such items.

Q. Well, it is intended to cover those things without specifying them?

A. That is just what my five cents is to cover, those fluctuations.

Mr. MATHEWSON: That is all.

At 5.25 P. M. adjourned to September 11, 1906, at 11 A. M.

Last Exhibits:

Complainant's 234.
State's U.
City's 45.

1951 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, TUESDAY, *September 11th*, 1906—11 a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Kirby, Mr. Burr.

1952 Mr. MATHEWSON: I have one or two additional questions to ask Mr. Humphrey on direct-examination.

ALEXANDER C. HUMPHREYS resumed.

Direct examination by Mr. MATHEWSON, continued:

Q. Are you familiar, Doctor, with the value of mains and services based on the cost of installation?

A. I am.

Q. Did you read the testimony of Mr. Simpson in reference to the 822 miles of mains, regarding which he testified as to the value of reproduction?

A. I did.

Q. Assuming that the Consolidated Gas Company has 822 miles of mains distributed in the sizes and mileage specified by Mr. Simpson, what in your judgment would be the present value, based on the cost of reproduction, of the mains to-day in the streets of New York?

A. The figure, if I recollect, that he gave was something over $12,000,000, and I satisfied myself that that was a very reasonable figure.

Q. Did you yourself go over the computation so that you are able to state from your own experience?

A. Yes, sir.

Q. Mr. Simpson also testified that the value of the services, based on the cost of reproduction, at present was about $1,994,000. Did you examine the question of the value of services?

A. I did.

Q. What is your conclusion on that?

A. That was also a reasonable estimate.

Q. Do you believe they could be reproduced for less than those figures?

A. I do not.

Q. The same as to mains?

A. The same as to mains.

Q. What do you understand by the term "service mains"
1953 as used in the two Acts establishing pressure, to which I called your attention yesterday?

A. Never having heard the term used before in the gas business, of thirty years' experience and more, I had to evolve a meaning for myself, and I presume that it must mean the distributing mains, as differentiated from any higher pressure mains, pumping mains, and the like, which are not connected to the consumer's. And in this I was simply confirming that interpretation given to the term by the commissioners at the end of their order in regard to the Consolidated Company, in which they referred to the pressure law and say that—I don't know the exact terms—say that in so much as the law passed confines the company to distributing gas to the city lamps within the limits of one inch and two and one-half inches, and in so much as the gas has to be conveyed to the private consumers through the same service mains as the gas to the public lamps, of course the law will have to apply also to the gas distributed to the private consumers, and as you cannot convey the gas to the private consumers through a service pipe which goes in the city lamp, of course it must mean the distributing mains.

Q. Is it, in your judgment, possible to construe the mains as meaning the services?

Mr. PAGE: Objected to. The doctor may be able to construe certain things but he cannot say what it is impossible for the Court to construe.

Question withdrawn.

Q. I ask you whether in your judgment the term mains, whether taken alone or preceded by the adjective "service," could be properly applied to the service pipes running from a main to a house?

A. Not possible, according to the practice of the gas business.
They are two distinct things, differentiated widely from the
1954 other; one is the main and the other the service from the main.

Mr. MATHEWSON: That is all. Now, if the Master please, I would like to call Mr. Halsey, who is temporarily in town.

N. WETMORE HALSEY, a witness called on behalf of complainant, being duly sworn, testified as follows:

Direct-examination by Mr. MATHEWSON:

Q. Where do you reside.
A. I reside in South Orange, New Jersey.
Q. Where are you in business?
A. 49 Wall Street, New York; and also have offices in Chicago and San Francisco.
Q. Are you a member of any firm?
A. Yes, sir; N. W. Halsey & Company.
Q. What is the business of that firm and of yourself as a member?
A. Dealing in investment securities; principally bonds.
Q. How long have you been in that business?
A. Over 20 years.
Q. Have you during that period ever purchased or sold utility properties, gas properties?
A. Yes, sir.
Q. Do you know the return which you expect to be able to get upon an investment in gas properties in the case of your purchases?

Mr. PAGE: Objected to as immaterial, irrelevant and entirely speculative.
Mr. BURR: I make the same objection.
The MASTER: I will take it.
Mr. Page and Mr. Burr except.

A. Yes.

Q. According to your own experience and such information as you have acquired in the banking business, what rate of return does the investor require on the investment in the purchase of a gas business?

1955

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
Same ruling. Both except.

A That is the first thing we look to, of course, as to what the return will be, and we expect to get a return at once, or within a very reasonable time, of at least 10 per cent.
Q. Ten per cent. upon what?
A. Ten per cent. upon the value of the property?
Q. Would it in your judgment be possible to interest capital in the acquisition of a public utility enterprise of the character of gas companies upon a less expectation of earning than 10 per cent.?

Mr. PAGE: Same objection.
Mr. BURR: Same objection.
Same ruling: Both except.

A. I think not, sir.
Q. Is that your exeprience?
A. That is my experience.

Mr. MATHEWSON: That is all.

Cross-examination by Mr. PAGE:

Q. You say that the rate of the return is 10 per cent. upon the value of the property. Has that any relation to the stock? Do you mean a 10 per cent. dividend on the stock?

A. I was not regarding securities. I was regarding the value of the property; what had to be paid for the property regardless of what securities might be issued to represent that investment.

Q. Well I understand then that you have been engaged in buying and selling gas works?

A. Why, I have done some of that, I don't know how
1956 many, but eight or ten gas plants I have bought. My business is more the handling of the bonds and my original interest in a property was to get a good safe issue of bonds and doing that I have sometimes thought that it was advantageous and have interested people in the entire property and reorganizing it; sometimes putting the properties together, consolidating a number of properties.

Q. I want to understand it. You say you bought and sold securities and the holder of those securities would expect to realize 10 per cent.?

A. I said if I were making an investment in a property, that I would expect on the investment from the amount of money and the value of the property, a return of at least 10 per cent. Some of them might be represented by securities with a fixed value, a fixed annual income say of five per cent., and others might be a stock representing ownership, and they are an entirely different class of investors that buy the stock than those who buy the bonds.

Q. You would expect then that a bond issued by a public utility corporation paying five per cent. interest would sell at 50.

A. Oh, no, I didn't say that at all. That is not a fair construction of what I said.

Q. How else could you get a 10 per cent. return on a five per cent. bond?

A. Did I say what amount of bonds I would issue?

Q. No, you said you would get 10 per cent. returns.

A. Yes, on the investment. To give you a concrete example, if you wish it——

Q. Wait a minute. You deal in investment securities, you have got bonds of a gas company that you want to sell, those bonds draw 5 per cent. Now, would you expect to give the investor those bonds at such a rate that he could expect to realize 10 per cent.?

A. No, sir, I said nothing of the kind.

Q. Now, in regard to stock, the stock of these public utility corporations: a stock that pays 5 per cent., would you expect
1957 that to sell at 50?

A. It depends entirely upon the conditions, but I should

think that a stock that paid 5 per cent. and was certain to continue to pay 5 per cent. would sell very much better than that; sell close to par.

Q. It would probably sell at 102 or 104?

A. It might; it might sell at 75, depending on all the conditions, franchise and the location, permanency of the business; all of those things enter into it.

Q. Isn't it a matter of fact that stocks and bonds are sold at about a 4 per cent. basis—that is, on a stock or a bond that brings a certain return the investor is willing to take 4 per cent?

A. No; you can buy a great many securities to-day on an eight or a ten per cent. basis if you wish to.

Q. But I mean securities that have paid their dividends for the last twenty years, where the company has a monopoly of the business and has paid its dividends regularly, isn't it your experience that those securities sell at about a four per cent. basis?

A. Well, as I say, you must take into consideration all of those things that go to make up the value of the securities, the permanency of the business, its franchise, situation, how much that monopoly, as you term it, is to be depended upon, how much it is subject to regulation and the permanence of the locality—all of those things must enter into it. For instance, the Chicago properties, for an illustration, the stock there has been selling around 90 to 95, yet it shows very good earnings.

Q. Have you dealt in Consolidated Gas Stock?

A. I don't deal in stocks at all. That is not my business.

Q. Are you informed at all as to the rate at which that stock has been selling and the rate of dividend it has been paying?

A. Yes, from the public quotations. That is all. I have never dealt in it. Never dealt in a share of it.

Q. Do you know while paying eight per cent. dividends it sold in the neighborhood of 200 or over?

A. Yes.

1958 Q. And to-day, while it pays a four per cent. dividend, it is selling at 140?

A. Yes.

Mr. BURR: No questions.

Redirect-examination by Mr. MATHEWSON:

Q. When you speak of ten per cent. earnings upon the value of the property, do you intend to indicate how much of that would be distributed to bonds and how much to stock?

A. Not at all. I make an original investment.

Q. Or whether the stockholders shall keep a part of the ten per cent. and put it into extensions of the property and pay themselves only a part?

A. No, sir.

Q. Do these considerations, to which your attention has been called by Senator Page, change your view at all as to the earning power of a property based upon its value?

A. Not in the least. The price at which stock may sell may de-

pend on manipulations or rumors that are gotten out. What it may sell at or be quoted at does not count.

Q. You know the stock of the Consolidated Gas Company carries with it the ownership of practically all the stock of the New York Edison Company, an electric company, do you not?

A. Yes.

Q. And would the future value of the property be reflected in the price of Consolidated Gas Stock?

A. Certainly it would.

Q. And might not expectations as to the future earnings have much to do with the present quotation of the stock and bonds?

A. It has a great deal to do with the stock.

Q. Isn't it a fact that the quotations of stock, as a rule, discount the future in that way?

A. It presents an entirely different investment from an entirely different point of view, than the man who invests in the bonds.

Mr. MATHEWSON: That is all.

Mr. PAGE: That is all.

1959 WILLIAM H. BRADLEY, recalled and further examined, testified as follows:

Redirect examination by Mr. MATHEWSON:

Q. In your absence Mr. Addicks presented figures in some detail showing the amount of $13,134,519.65 as the estimated cost of the first Astoria unit, including land and tunnels. Were those figures made up by you?

A. Yes.

Q. And is that the correct estimate as presented here?

A. $13,134,519.65.

Q. He also specified certain other items amounting to between $2,000,000 and $2,500,000, which he said represented items some or all of which might be added to the first unit for its completion?

A. That is correct.

Q. And are those estimates also yours?

A. Yes.

Q. Are they — best estimates you were able to form?

A. The best estimates I could give at the present time.

Q. You testified from memory to Senator Page that, taking the total at about $13,096,000, and deducting the value of the land and tunnel, it would leave a balance of $9,217,000. The exact figure is what?

A. $9,351,961.37. The estimate including the tunnel is $12,001,961.37.

Q. If you deduct from the $13,134,519.65 the land and tunnel, what is the remainder?

A. $9,351,961.37.

Q. Which of those items included in the $2,582,500 will it be in your judgment essential to construct in connection with the first unit?

A. It will be absolutely essential to include practically one-half of

the amount. The others may or may not be included, as matters develop during construction. Do you want me to go on with the items?

Q. Yes.

1960 A. Coal storage bridge, $150,000; foundations $80,000; rope haulage system, $45,000; coke storage plant, $50,000; scows and tugs, for transportation to the coke unloading and discharging stations, $500,000; stables, horses, harness and wagons, $10,000; those I consider to be essential to the construction of the first plant; grading and filling I should put in there also, $50,000; the balance, by-product plant, switch yard, dwellings for company's employees, and the steel works for the second 15,000,000 foot holder, as I say, as the work develops and construction goes on, we may find it necessary to put it up, but I hope not.

Q. You have but a single holder there now?

A. There is but one holder there now.

Q. Would you consider it safe to operate without a reserve holder?

A. It is not considered absolutely safe to do so. Many plants are worked with one holder, but holders are liable to accident, and with an accident the whole plant is stopped.

Q. It appears that two tanks are included in the $13,134,519.65. It is necessary to construct the two tanks at the same time?

A. Yes.

Q. From an engineering standpoint?

A. From an engineering standpoint. The second is pretty closely alongside of the other one, and I never like to excavate closely alongside of a very large tank filled with water for fear of breakage, bursting it.

Q. Referring to the manufacturing capacity of the plant, do you consider it safe to operate a plant without a substantial margin over for reserve?

A. Of course not, no, sir. You simply cannot do it. I do not think it is safe to operate gas plants for lighting a large city like New York with less than 20 per cent. reserve.

Q. Of your manufacturing capacity?

A. 20 per cent. reserve of the manufacturing capacity.

Q. Do you have the supervision of the expenditures in the

1961 engineering department for material, labor, &c., generally speaking?

A. Oh, yes, in all cases.

Q. Do you employ any men in the engineering department who are not required by the needs of the business?

A. Not if I know it.

Q. You would be likely to know it, would you not?

A. Yes.

Q. And how about the compensation that they receive? Do you pay the market rate or more or less?

A. They are paid the market rate; a great many of them think they are not paid enough.

Q. Do you pay any more than you find it necessary to pay to procure the required labor?

A. No, sir, I look into that very carefully. The first of last July my assistant recommended a lot of increases to our various men, but I said no, I would not grant it.

Q. Are there any expenditures that you deem unreasonable in your department?

A. No, sir.

Q. Mr. Bradley, it has been shown in evidence that by the reports of the company filed with the local tax assessors or with the State Board of Tax Assessors, the plant and real estate of the company had been inserted at something like $19,000,000 for several years past, which it is testified is made up of the land or real estate at the book value, and the figure for the plant of the company, amounting in 1904 to $8,456,595.71, whereas the book was $15,775,462.88, or nearly twice as much. Do you remember any conversation with Mr. Carter in the year 1902 in reference to the basis of placing the value of the plant for the purposes of the tax report?

A. Mr. Carter applied to me for a figure, and I took advice with our general counsel on the subject and was informed as to what the law was in the case. Acting upon that advice I simply cut the book value in half and added to that—the absolute figure I can-
1962 not give you; I have not got them—but I added to that, if my recollection serves me, between $600,000 and $700,000 as the scrap value of the plants to be dismantled, understanding that we were going on with our Astoria business and that within a very short time practically the works would be dismantled and simply scrapped, as we had no market for them. The resulting figure from that, half of the book value and the six or seven hundred thousand dollars that I added, was the figure that Mr. Carter used in the tax report.

Q. You went into no detailed computation at that time, did you?

A. I went into no detailed valuation, because I assumed that the book value was very nearly if not practically correct.

Q. Then, if I understand correctly, you assumed that one-half of the plant would remain in New York indefinitely and you took that at its full value?

A. That it would remain in New York long enough to be subject to the payment of taxes; the other half would be simply thrown away.

Q. And you took the scrap value of the other half, which amounted to a few hundred thousand dollars, did you?

Mr. BURR: I object to this method of cross-examining this witness. That is leading and suggestive, and it is unnecessary to put all this into his mouth.

The MASTER: Do not lead him.

A. I testified to the same thing before the Gas Commission. The testimony is there.

Q. Did the scrap value plus the one-half of the plant at full value equal the figure that you gave Mr. Carter at that time?

A. It did.

Q. Do you remember what the advice of counsel was as to the value that was to be used?

A. The advice *to* counsel was to me, or the statement that
1963 counsel made to me, was that the assessors were instructed that a manufacturing plant—wait a minute, I want to get that straight—that the value of a plant was the value of the land; that there was nothing to be added to the value of the land except such improvements as were made valuable to the land. If the plant added no value to the land, if it was a detriment to the land, it was not to be assessed.

Q. Was it to be assessed at anything more than what it would sell for beyond the value of the land, in case of sale?

A. That is it; that is what I intended to say.

Q. What has been your experience as to the amount at which a gas plant will sell for when it is necessary to sell it?

A. I have had some little experience right here in New York with that. Shall I give it?

Q. Yes.

A. For instance, the 3,000,000 holder at the 18th Street station, that cost the company nearly $400,000, was sold by the city, when it was taken, for about $9,000. I was present at the sale; I was there and heard it, and I know that to be a fact.

Q. Do you know what the 111th Street plant brought when it was sold?

A. The 111th Street plant as an entirety brought between $5,000 and $6,000 at public sale. I was also there at that sale.

Q. That was a plant that cost a considerable sum in addition to that?

A. A plant that was as large in capacity as some of them in the city to-day. The 18th Street, to go further, the 18th Street plant was sold by the city, the portion taken, of a value of about a million dollars, sold for something about $6,000. That was sold at public auction. I was also there at that sale.

Q. And was not a great part of the 111th Street plant that was so sold practically new?

A. It has only been operated some four or five years.

1964 Q. You were not asked any questions on this subject before the Stevens Committee, were you?

A. I do not recall that I was; no, sir.

Q. Did you state these same facts before the Gas Commission?

A. I did as far as I was asked; I do not think I went into it to the extent that I have now, but some questions were asked me that I answered.

Q. Let me ask you whether the figures that you gave Mr. Carter, and which, with slight adjustments which he has testified to, amounted to $8,456,595.71 in 1904, as shown in Exhibit No. 223, represented the structural value of the plant as an operating concern?

A. Not at all.

Q. Or the original cost of construction or cost of reproduction?

A. No bearing whatever on that.

Q. You have testified that you have had experience in the construction of gas plants and parts of gas plants, since you have been in the gas business, and as an engineer you have superintended other constructions, have you?

A. Yes, sir.

Q. Did you make an estimate of the value of the plants of the Consolidated Gas Company to-day on the basis of the cost of reproducing them?

A. I have made a general estimate; yes, not detailed.

Q. As accurately as you could from a general estimate, and your knowledge of the gas business?

A. Exactly; as accurate as I could.

Q. Will you state what that estimate is?

A. At the time, if I recall the figures correctly, $18,321,000.

Q. That is the cost of reproduction, with allowing for depreciation, is it?

A. Yes, sir.

Q. And what does that include?

A. It includes apparatus, buildings and gas holders.

Q. Not mains and services, or anything like that?

A. No, sir, not mains or services or land.

1965 Q. Is that your present estimate also?

A. I see no reason to change it.

Mr. MATHEWSON: That is all. There is no other witness here. I would like to have them cross-examine Mr. Bradley, if they could go on with him. I do not want to get him down here oftener than I have to. I shall have one or two other witnesses for very brief examination, but I cannot get them here before to-morrow morning. I was not prepared to go on. They were out of town, and I was unable to reach them; some of them, at any rate. There may be one in town, but I was not able to see him this morning. I shall not take with them over thirty minutes all told, I think; certainly not over an hour, and I ask permission to produce them to-morrow morning.

The MASTER: You have no other witness here to-day?

Mr. MATHEWSON: No, I have witnesses here for cross-examination, Mr. Simpson, Mr. Humphreys and Mr. Carter, if he is desired.

The MASTER: You have other witnesses on the direct?

Mr. MATHEWSON: I shall have only two witnesses, and they will only take about the same length of time as Mr. Halsey.

The MASTER: Are they along the same general lines?

Mr. MATHEWSON: Yes.

The MASTER: Under the circumstances there is nothing for us to do but to go on without losing any time, and cross-examine the first witness there is, Mr. Bradley.

Mr. PAGE: If the Master assumes the responsibility.

The MASTER: I do not want to assume the responsibility

1966 of either closing Mr. Mathewson's case or wasting the day, so I do the next best thing.

Mr. MATHEWSON: I said that I would only take a day and a half, but I have only taken about two hours or two hours and a half, and I think another hour will do the whole business, that is, on my direct.

Recross-examination by Mr. PAGE:

Q. Have you produced a detailed statement of the plant at Astoria which I requested last July should be prepared?

A. The items for which you made out a list?

Q. Yes.

A. Is that it, Mr. Mathewson? (Hands paper to counsel.)

Mr. MATHEWSON: This is what you requested. This is the best they could do. That will perhaps meet your requirements, Senator.

Q. Is the horizontal retort house east or west, the easterly inclined house? I notice that you refer to an east holder, and an east condenser and an east purifier house. The horizontal retort house is one that would be required at the east unit?

A. Well, it is all one unit.

Q. I understand, but I mean by that, it is connected with the east condenser house and the east purifier house?

A. They are all connected together. The reason for making the east and west house is because the houses would be too large; they are simply a duplication, not making the buildings too large or the apparatus too cumbersome in one place.

Q. If we take the east retort house, the east condenser house and the east purifier house, and the east tar extractor and washer house,

1967 we would have apparatus that would be capable of handling ten million cubic feet of gas per 24 hours?

A. Not entirely; the boiler house is common to all; so is the meter house.

Q. No, but I said we would have apparatus.

A. Yes, the apparatus contained in those buildings is capable of handling that. Other buildings would have to go in to make the unit complete.

Q. The horizontal retort house or the east retort house is not yet completed, the building itself, is it?

A. Not entirely. There is a lot of finishing work to be done, small work, small pipes and small construction of all sorts.

Q. And you estimate that the building itself will cost $302,304.03?

A. That is correct, sir.

Q. That building contains 60 benches of 8 retorts each, retorts 16 by 26 by 21 feet 9 inches; those are through retorts, are they?

A. Through retorts.

Q. And the capacity of that house is 10,000,000 per 24 hours?

A. Rated at ten million.

Q. And that has in it all the coal and coke handling apparatus, charging and discharging machinery and everything else that is necessary to a complete retort house of that capacity?

A. It will have on completion.

Q. And the estimated cost includes that as a complete operating retort house?

A. Yes, sir.

Q. And the estimated total for that is $933,291.09?

A. For the apparatus.

Q. For the apparatus?

A. For the apparatus, excluding the building.

Mr. PAGE: We have had the building before; that is about $302,000.

Q. The east purifier house will cost, when completed, $159,430.48, is that right.

A. $159,430.48.

Q. The purifying apparatus complete, piping and everything, would be $200,142.80?

A. Correct.

1968 Q. And that is sufficient purifying capacity to handle the 10,000,000 cubic feet of gas per day?

A. Easily.

Q. The east condenser house will cost $25,960.03 completed?

A. Correct.

Q. And the condensers and rotary scrubbers in that building, $83,405.72?

A. That is right.

Q. And that is sufficient capacity to handle the ten million cubic feet of gas daily?

A. Yes, sir.

Q. What is this tar extractor and washer house?

A. That is part of the apparatus for the manufacturing. The tar extractors, as their name implies, take the tar out of the gas.

Q. This is some improved method, is it?

A. Improved method of tar extracting.

Q. That is something that you do not have in your plants in Manhattan, is it not?

A. We haven't any of this improved type.

Q. You extract your tar in the condensers, don't you?

A. In the condensers.

Q. And the hydraulic main.

A. And the hydraulic main, which is something we do now. This is a further treatment.

Q. This is for additional purification of the gas and also to recover more residuals?

A. Yes, sir.

Q. And that will cost $41,965.24, the building?

A. Right, sir.

Q. And in this you also have a cyanogen washer, I see, besides tar extractors?

A. The naphthaline and cyanogen washers are also in that same house.

Q. And the contents of that building are worth $124,617.79 complete?

A. Correct. I will say right now, Senator, that there may be some little variation from these figures when the thing is absolutely complete. As you see at the head of this column, it is an estimate to complete.

Q. I think it is safe, however, for us to assume that the 1969 estimate is large enough to cover any contingency.

A. It is intended to be, but may not be.

By Mr. MATHEWSON:

Q. Does that estimate cover the 10 per cent. undistributed expense for the Consolidated Company?

A. No.

Q. Or any interest?

A. No, sir.

By Mr. PAGE:

Q. The east holder is the one now completed, or substantially so, is it not?

A. No, sir.

Q. Well, it is——

A. That is the one that is not completed. The west holder is substantially completed. That is, the west holder tank is now completed; the holder itself is now being put in.

Q. Then to take a holder of fifteen million cubic feet capacity per day we would have to take the value of the west holder?

A. Yes, if you want to get a line right through.

Q. Yes. If you were building a works of only ten million cubic feet capacity a day, you would not build a holder of fifteen million cubic feet capacity, would you?

A. I would, if my company would allow me to; if they wanted to spend the money.

Q. It is considered sufficient holder capacity for a plant, is it not, if you have a total capacity equal to twenty-four hours' output of the plant?

A. Yes, but a 10,000,000 capacity plant might on an emergency send out a good deal more than 10,000,000 feet.

Q. Certainly.

A. And the send-out, as I use the term send-out—you say output—the output of a 10,000,000 capacity plant might be largely in excess of 10,000,000 feet in a great many cases, and is often.

Q. Well, do you mean by that that you would draw on
1970 the storage capacity of your tank?

A. Yes, sir.

Q. In excess——

A. In excess of the quantity made in any given twenty-four hours.

Q. But in computing the holding capacity of a company, all the holders that it has should be taken into consideration, those at the works and also those distributed around in different parts of the city?

A. If they are available for the storage capacity, yes.

Q. And it is considered good gas engineering, is it not, to have sufficient holder capacity for twenty-four hours' production of the plant?

A. No, sir; for twenty-four hours' output.

Q. Well, for twenty-four hours' output of the plant. How much is this horizontal retort house capable of producing and passing into the holder per day?

A. It is rated at 10,000,000 feet, but I cannot sit here and specu-

late on what it may produce, whether it will be one million more or less.

Q. You testified that it was considered good gas engineering to have a 20 per cent. reserve?

A. Yes.

Q. Now, have you a 20 per cent. reserve here, so that this plant could produce 20 per cent. more than 10,000,000 cubic feet?

A. No, sir; I should not run the house up to within 20 per cent., and then consider that I had the 20 per cent. left after that.

Q. Do you mean that you would only run this up to 8,000,000 cubic feet?

A. That would be the safe way. If after the 15th day of December or previous to the 15th day of January, if there was a demand for gas that made it necessary to go beyond that, I should do it, but I am speaking now of a general principle, not what might be done in one day or one week, but on a general principle I want 20 per cent. reserve. I can use that 20 per cent. reserve perhaps on
1971 an emergency, but not for a general thing.

Q. If you have several plants would you have a 20 per cent. reserve of production in each plant?

A. I would try to.

Q. Then, would you have, having an output of thirteen billion cubic feet in a year, would you divide that by 200, making 65,000,000, and also have a 20 per cent. reserve on the 65,000,000?

A. Yes.

Q. Then you would also have a reserve over and above the 65,000,000 of 13,000,000?

A. Let me make an explanation right there. I don't think you have grasped the situation.

Q. Very likely not.

A. We must have plant sufficient and with an effort to preserve the 20 per cent. reserve for the maximum days of the winter. We cannot put in a plant for the winter and take it out for the summer. We have to have it and keep it, and get it into shape for use. When I speak of the maximum capacity of the works I am speaking of the winter, not for the summer months, when we are down to perhaps one-half the capacity of the plant. But that plant must be there, whether it is 200 days or 365 days; that plant must be there.

Q. Then you don't have a 20 per cent. reserve over and above the maximum capacity of the plant?

A. The reason we divide by 200 is not to get the capacity of the plant at all; it is simply to get what amount the output of gas or manufacture of gas will be for the entire year, and it is 40 or 50 per cent. more in the winter than it is in the summer, but that 200 division is the correction to average the whole thing through the year simply, and has nothing to do with the capacity of the plant.

Q. I asked you whether it was 20 per cent. reserve? Whether the reserve should be 20 per cent. more than the maximum?

1972 A. 20 per cent. should be the reserve more than the maximum make in any one day.

Q. This holder, when completed, you estimate will cost $919,800, do you? I have taken the west holder as being the one completed.

A. That is correct. Yes, sir, that is the west holder.

Q. Now the exhauster house, as I understand it, is sufficiently large to handle 20,000,000 cubic feet per day instead of 10,000,000?

A. That is its design.

Q. Would a 10,000,000 capacity exhauster house cost more than half as much as this?

A. It would.

Q. What would you estimate that a 10,000,000 daily capacity exhauster house would cost?

A. Do you mean the house or the entire house and contents?

Q. Well, you can give it either way, the house separately or the house and contents, which would be the easier?

A. The house and contents that I have here cost $66,209.45.

Q. How much?

A. $66,209.45.

Q. Well, that is what this one cost?

A. That is what I say, that this one cost. I should say that an exhauster house would cost $40,000.

Q. That is, with contents complete?

A. Contents and house.

By Mr. MATHEWSON:

Q. To take care of how much?

A. 10,000,000 feet per day.

By Mr. PAGE:

Q. What unit did you use to multiply and produce that result, Mr. Bradley?

A. I added approximately, as near as I could tell, the cost of an extra machine. In this exhauster house that we have provided now there is an extra exhauster to be used in case of a break-down on any one of the five. That would have to be provided in a single house as well and would cost just as much.

Q. You have five exhausters and compressors in this house?

1973 A. Five exhausters and two compressors.

Q. And of that one exhauster is for emergency?

A. For emergency or a break down, or whenever they have to be shut down to pack the valves.

Q. So in a 10,000,000 capacity house, you figure it would be necessary to have 3 of those exhausters?

A. Three.

Q. Now we will take the meter house. Will you make the same computation there, this being a meter house to handle 20,000,000 daily capacity, and state how much it would be for a meter house of ten million.

A. The meter house I should simply divide by two.

Q. Then you should say the meter house would be $11,861.99?

A. What are you reading from?

Q. The meter house, the house itself. Do you mean to take the whole thing?

A. I was taking the whole thing.

Q. Well, we will do that.

A. $32,179.30 I make it without the odd cents.

Q. Now we will have a boiler house, I suppose, in this plant. How would you treat that to reduce it to ten million?

A. I should divide that and add to that the value of the chimney.

Q. The boiler house, then, with contents would be $29,944.48?

A. $34,866.01 for the total.

Q. Adding the chimney?

A. Yes. A single house has to have a chimney the same as a double house.

Q. Well, it would be the same size chimney?

A. Practically the same size. There would not be difference enough to count.

Q. Now we have the tar tanks and ammonia tanks yet to put into our plant. How much would you add for those?

A. The underground tar tanks are $10,245.73.

Q. Would you need as large tar tanks for ten million feet
1974 as you would for twenty million?

A. Well, not as a rule, no. We always make our tar tanks as large as we can. I should say for a single unit that our tar tanks should be $12,000, in place of the $10,245.

Q. That is, it would be more.

A. It would be more than half.

Q. Well——

A. Excuse me, I should have said $7,000. I was adding two thousand dollars and I added ten thousand instead of five.

Q. Seven thousand dollars and how much?

A. About $7,000, I would put that in at.

Q. And the ammonia tanks?

A. The ammonia tanks I should put in at $20,000.

Q. What else is there that would be necessary for completing the apparatus that we have not already taken into consideration?

A. There are the general connections on the last page.

Q. How much would that be for a ten million plant? Half of what you have here?

A. Well, yes, half. This is an approximation, you understand. I will not be bound by the figures because it is not a fair line of picking the thing out.

Q. What is there unfair about it? We want to be fair.

A. Because it is simply impossible for me to sit here in a general way and say what proportion of that $87,000 is due to the west house or to the east house. I simply cannot do it without going back to my drawings and estimates and finding out just how much there is.

Q. Well, if you are piping a plant of two separate divisions it would only take half as much pipe, would it not, to pipe one of those?

A. Theoretically, yes; practically, it might be altogether different.

Q. What else is there?

A. Electric power house.

Q. Well, for a 10,000,000 capacity electric power house?

1975 A. And going on the same line, it should be half of $154,000.

Q. That is $77,000?

A. $77,000.

Q. What else would you add?

A. That is true of all the remaining items, tools and implements, horses, office furniture and fixtures, boats and scows, and permanent fresh water system.

Q. That should all be divided?

A. That should all be divided, if you want to go on in this way.

Q. I hate to abandon the road just as we have reached the end of it.

A. All right, I will go with you to the end, but if we do, we will run up against a stone wall.

Q. Then I will stop.

A. Will I take all these in a lump in the end, Senator?

Q. Yes, if you would. It is $130,706.64, isn't it?

A. That is right. That is $65,353.32, half of that.

Q. The total of these items that we have gone over that enter into the construction of a plant to produce ten million feet of gas daily is $3,110,021.93. Would you accept that, or would you want to verify that?

A. No, sir. There is an aggregation of items that were not called off by you on that paper there amounting to over a million dollars.

Q. Well, what are those?

Mr. MATHEWSON: It is perfectly apparent what they are. He has stated fully, and he has also stated that he would not give that as an estimate.

A. I stated definitely a few moments ago I would not stand by these figures, because I do not think it is a proper or fair way to get them out.

Q. Well, for the principal things that I have mentioned in the examination, that would be a proper cost value, wouldn't it?

A. It would be an approximate cost value. As an en-

1976 gineer, I would not stake my reputation on an estimate of that kind.

Q. No, but supposing——

A. And I would not ask anybody else to use it.

Q. But supposing I am willing to risk my reputation, and we will take these particular items, my question was whether they did not total up $3,110,021.93?

A. That is the figure you have there, yes; but on my reputation as an engineer, not yours, but mine, I would not accept it. If I had known, Senator, that you wanted to get this thing out, I would have undertaken to do it, but I really do not think it is a fair way to get at it.

Q. Wherein is there any unfairness in any of the figures you have given?

A. Simply because they are guesses to a large extent. They are estimates in a certain sense in the very foundation, and the dividing arbitrarily by two, simply because there are two plants there, is not the proper method of getting at it.

Q. Well, you haven't done that in all cases.

A. I haven't done it in all cases, but in many cases I have.

Q. Well, didn't you consider it proper in this case to do so?

A. I did not. I so stated.

Q. Well, now let us take those items and state what you would consider proper.

Mr. MATHEWSON: I do not think it is fair to ask an engineer on the stand to go to work and to figure up out of his head, without time to consider, what the plant would cost for the capacity, with all the changes that might be involved.

The MASTER: If he cannot do it, he can say so. The Senator is entitled to an answer to his question.

1977 A. I will say this, that so far as possible I have checked up my expenses and estimates of the total expense, and I find that they are different. Taking the whole thing all through, my estimate was within ten per cent. of what is the cost at the present time.

Q. Well, isn't your estimate on this as good as your estimate on the rest of the plant that you have been furnishing?

A. It is not, because this is emasculated.

Q. I know, but when I ask you to state what it would cost to produce an exhauster house for ten million capacity, and you give me a figure, isn't that as good as your figure that you have given on the exhauster house, if they are set in the other plants?

A. I have not estimated on an exhauster house of ten million.

Q. The only things that I asked that we took by dividing by two were the meter house, tar, and ammonia tanks, the boiler house and the contents, and the general connections?

A. General connections, and all the piping about the works. What did you say that figure was?

Q. $3,110,021.93. Now, you stated you thought this was unfair to you as an engineer to arrive at an estimate in this way. In what way would it be dealing fairly with you?

A. You omitted all the grading, filling, and the necessary work on real estate to produce this plant. You omitted the bridge that was necessary to prepare the docks for the receipt and discharge of coal; you omitted the wharves, you omitted the coke handling plant. It is not anything like up to where it should be.

Q. Well, I think your criticism on the whole as to the coal storage and coke plant is probably well founded and we will take that. What would be the value of a coal storage and coke plant necessary to handle these articles in a 10,000,000 daily
1978 capacity plant? Do not bother with anything in my question except the coke and coal?

A. No, I cannot take it to pieces in that way. I would only be making a fool of myself and wasting time and I don't want to be the "goat."

Q. Well, I will be the "goat."

A. The coke and coal is only a small portion of it.

Q. I know, that is what I want.

A. The coke and coal handling business would be $500,000, or $250,000 for the half.

Q. That raises our total to $3,360,021.93.

Mr. MATHEWSON: It raises your total, Senator, not ours.

Q. Have you an electric power plant in any of your Manhattan stations?

A. Yes, sir.

Q. But I understand that you have not this tar extractor and cyanogen?

A. No, sir.

Q. And we took the value of the tar extractor house and contents at $166,583.03?

A. Whatever it was. Yes, $166,583.03.

Q. You were connected with some of the constituent companies before the consolidation, were you not, as engineer?

A. May I ask you to define "constituent companies?"

Q. By constituent companies I refer to the companies that consolidated and became the Consolidated Gas Company?

A. I was.

Q. You became the engineer, did you, of the Consolidated Company, upon the consolidation?

A. No, sir, two years afterwards. The consolidation was in November, 1884; I became Chief Engineer in December, 1886.

Q. Are you familiar with the capacity of the various plants that were taken over by the consolidation?

A. Except in a general way. Up to the time of my abso-
1979 lute connection with them I had no knowledge of the capacities of the other plants.

Q. But within two years after the consolidation you took charge and then of course you had knowledge?

A. Yes. Within two or three years and I became familiar with it—three or four years.

Q. Have there been any substantial changes in that time in those plants?

A. Yes, a great many changes.

Q. In the way of increased capacity?

A. Increased capacity.

Q. Now you know what the increases were, do you?

A. I know generally that the increased capacity of the past 20 years has nearly doubled; nearly, if not quite.

Q. Yes, in the past 20 years it has doubled, but I am speaking about the time when you became familiar with them, between that and November, 1884, had there been any substantial increases in the capacity of the plants, two years having elapsed?

A. I don't understand the question.

Q. You took charge in 1886?

A. I took charge in December, 1886.

Q. And the consolidation took place in 1884?

A. Yes.

Q. Now, between November, 1884, and December, 1886, had there been any substantial changes in the plant?

A. That I cannot say, because I had nothing to do with any of the companies except my own.

Q. Which was your own?

A. The Municipal and Knickerbocker. Now the 44th and 99th Street Stations.

Q. You know what the capacities were when you took charge in 1886?

A. Between twenty-seven and twenty-eight million, if my recollection serves me. I cannot give to a few feet or a thousand feet.

Q. Could you give me approximately the capacity of the
1980 various plants at that time—14th Street plant?

A. I may give it approximately. Twenty years is a long time to remember back on a thousand feet of gas. I should say 14th Street——

Q. If you would prefer to refresh your recollection by looking at anything so you can give it more exactly, you may do so.

A. I will see how near I can come to it.

Mr. PAGE: While this witness is making his computation, I will offer in evidence this statement, prepared by Mr. Bradley, from which he has been testifying.

Mr. MATHEWSON: I think the paper had better have some heading.

By Mr. MATHEWSON:

Q. What is this paper, Mr. Bradley, that the Senator has just offered in evidence?

A. It is a statement of the expenditures on the Astoria plant to May 31, 1906, the amount estimated to complete, but it does not comprise all the items necessary to the plant.

The MASTER: Now, take the witness' answer to the former question as to the capacity of the plants.

The WITNESS: Approximately, in 1886 the

14th	Street	station	had a	capacity of	3,500,000
21st	"	"	"	"	5,000,000
44th	"	"	"	"	4,000,000
99th	"	"	"	"	2,500,000
18th	"	"	"	"	3,500,000
111th	"	"	"	"	2,000,000
42nd	"	"	"	"	4,500,000

That is somewhere near correct. It is not absolutely correct.

1981 By Mr. MATHEWSON:

Q. What part of 1886 do you mean? When you took charge, in December, 1886?

A. When I took charge, in December, 1886. That total is about 25,000,000.

By Mr. BURR:

Q. How much of that was coal gas, and how much was water gas?
Mr. MATHEWSON: Just give those that were coal gas plants.
A. Coal Gas Plants:

14th Street Station	3,500,000
18th Street Station	3,500,000
111th Street Station	2,000,000
42d Street Station	4,500,000

The rest were water gas.

At 1 P. M. a recess was declared to 2:15 P. M.

1982

After Recess.

WILLIAM H. BRADLEY—Cross-examination continued by Mr. PAGE:

Q. The 14th Street plant to-day has a capacity of 5,000,000 cubic feet, has it not?
A. Yes, sir.
Q. Can you say when the increase was made of 1,500,000 cubic feet to that plant?
A. It was made at times; it was not made all at once; at different times during the past twenty years.
Q. The 21st Street plant to-day has 24,000,000 cubic feet capacity as against 5,000,000 cubic feet in 1886?
A. Yes, sir.
Q. Was that change made at one time or at different times?
A. The change was made at different times as the necessities of the case warranted.
Q. What is the capacity to-day of the 44th Street plant?
A. 8,500,000 cubic feet.
Q. There has been no change in the 42d Street plant in capacity?
A. No change in capacity.
Q. Has there been any change in apparatus?
A. There have been some odd little pieces of apparatus put in. I put in an additional ammonia scrubber to take the ammonia from the gas; it did not add anything to the capacity.
Q. You have some generator benches, haven't you, at 42d Street?
A. Regenerator benches, yes, sir.
Q. Have they been put in since 1886?
A. They were in at the time of consolidation.
Q. So far as addition to the plant is concerned there would be nothing practically to the credit of the 42d Street station?
A. Nothing to manufacturing capacity.
Q. The 99th Street plant is 5,500,000, now?
A. Yes.
Q. That makes a daily capacity of 47,500,000 cubic feet, and to that you will add the oil gas that is produced at the 21st
1983 Street station for the use of 14th Street, 3,500,000 feet?
A. Yes.

Q. The plants at 18th Street and 111th Street have been abandoned, so that there is no production of gas from those?

A. They were condemned, taken by the city, both of them.

Q. Well, there is no production of gas?

A. No.

Q. Then, by the wiping out of these plants the capacity of the original plants has been reduced to 19,500,000 cubic feet, the remaining balance?

A. That was nearly correct; I should say that that was right within 500,000 cubic feet, as nearly as I can estimate it, 20 years ago. (Figures.) Yes, 19,500,000 cubic feet.

Q. So that by such additions to plant that have been made in the last 20 years you have increased the capacity of your works from 19,500,000 cubic feet to 51,000,000.

A. That is correct.

Mr. MATHEWSON: Assuming that his estimate of the capacity in 1886 is correct.

The WITNESS: Yes, assuming that.

Q. Well, you are pretty sure you are right on that, aren't you?

A. I think I am right within a half million feet; I would not say beyond that.

Q. Referring to Complainant's Exhibit No. 79, which shows the variation in real estate plant, property and construction from the date of consolidation, November 11, 1884, to October 31, 1905, we find the plant, buildings, machinery and holders to have been valued on the books of the company in the amount of $12,182,491.41, and on October 31, 1905, a valuation of $16,087,428.72, showing the net increase $3,904,937.31. Is that the value as shown on the books of the company?

A. That is as shown on that Exhibit.

Q. I did not finish the question—the value as shown on
1984 the books of the company of the increased plant since consolidation, less depreciation, so that $5,132,620.41 would be carried here as construction since consolidation.

A. Carried as construction since consolidation, $5,132,620.41, that is correct.

Q. And by the expenditure of that five million dollars in construction you have increased the capacity of your plant by 31,500,000 cubic feet daily; is that right?

A. That is right.

Q. I understand that you prepared a valuation of the plant which is set forth in State's Exhibit D, being the report of the Consolidated Gas Company to the State Board of Tax Commissioners of the State of New York for the year ending June 30, 1904, and that you placed the valuation of the plant and real estate as $19,673,075.42; is that right?

A. I do not recall that at all, sir.

Mr. MATHEWSON: Mr. Carter testified that he added the book value of the plant to the figure that he got from Mr. Bradley for the plant.

The WITNESS: No, sir; I did not prepare that. That is real es-

tate and plant. I had nothing to do with real estate at all; I did not place any value on it.

Q. Then, your part of making up this figure of $19,673,075.42 was to give the valuation of the plant; is that right?

A. It was limited entirely to the plant.

Q. And you fixed that figure at $8,456,595.71?

A. About that figure; I have no recollection as to what the exact figure was. That is nearly correct, I should say.

Q. On direct-examination didn't you testify to that specific figure?

Mr. MATHEWSON: No, he said he made it up in 1902.

1985 The WITNESS: 1902.

Mr. MATHEWSON: Not 1904; and Mr. Carter stated that he employed that same figure with slight variations.

The WITNESS: As far as 1904 is concerned, if my memory serves me, I hadn't anything to do with it.

Q. In 1902 then you fixed the valuation of the plant at $8,456,595.71, is that right?

A. I do not know whether it is or not now, I cannot recall it. I simply make the statement that I made before, that I took this book value and added between $600,000 and $700,000 to it. Whatever that amount brought was the correct amount. I have not seen the figures since and have not had any occasion to refer to them.

Mr. MATHEWSON: The figure that Senator Page gives you is the figure in the tax report for 1902.

Mr. PAGE: No, the figure I just gave you is the figure you used on your direct-examination. Now, if you want to change that——

Mr. MATHEWSON: You are mistaken; he does not want to change anything.

Mr. PAGE: Let us have the explanation. Do not shy at every figure that I give you, because this is taken right from your direct testimony. Now if you want to change that, that is the figure that I took down on your direct-examination, and if you want to make any change in that make it now.

Mr. MATHEWSON: In my question, Senator, I said that the figure which was adjusted by slight variations was $8,496,000, or whatever it is there, and I expressly asked him whether he gave the figures to Mr. Carter in 1902 and he did, he said, and Mr. Carter testified that he made some slight adjustments as to changes in

1986 items made between those dates. It is perfectly clear.

Q. As I understand it, this figure that you have given here is not your testimony but Mr. Mathewson's testimony; is that right?

A. That is my testimony.

Q. Then you are willing to stand by it?

A. I am willing to stand by the statements that I made before the Gas Commission and that I made here before, that I took half the book value, whatever that value was. It was about $15,000,000, and I added to that between $600,000 and $700,000 for the figure that I gave to Mr. Carter. Now, whether it was $100 or 100 cents, more or less, I cannot say more than that. I simply speak from my memory of what transpired at that time.

Q. Now, as I understand your explanation to-day, the reason that you divided the book value of this property by one-half was that you expected the plant to be removed to Astoria?

A. We are going on then, intending to remove it.

Q. And that was in 1902?

A. 1902.

Q. And you understood that you were preparing figures to be submitted for use by the State Board of Tax Commissioners in arriving at some tax for that year, didn't you?

A. Yes, arriving at the tax for that year.

Q. How far advanced was the Astoria plant in 1902?

A. The plans were pretty well drawn; very little physical work had been done.

Q. You did not anticipate that you would be able to remove the plants during that year, did you?

A. Of course not. If I had I should have reduced it very much more.

Q. Well, did you anticipate that you would remove half of the plant that year?

A. I did not anticipate removing any in that paticular year.

1987 Q. Could not a good portion of this plant be removed to Astoria, if you merely wished to reproduce the plant there?

A. A portion of our present plant?

Q. Yes.

A. No, sir.

Q. Why not?

A. They are too much cut up into small units that are impractical to be placed on a modern up-to-date works. Everything is too small.

Q. This book value included holders, didn't it, which you divided in two?

A. It included holders.

Q. Was it ever your intention to remove the holders?

A. Not as an entirety.

Q. How did the value of the holders compare with the value of your manufacturing plant?

A. Well, in what way do you mean, in the total amount?

Q. Yes.

A. Well, they are varying all the time.

Q. In this valuation that you gave to-day of some $18,321,000, how much of that is holders and how much of that is manufacturing plants?

A. The holders is five and one-half million and the plant is twelve million eight hundred thousand.

Q. In this estimate which you made in 1902, corrected by Mr. Mathewson in 1904, how much should be taken for the value of plants and how much for the value of holders?

A. That is a question I cannot answer because I made no subdivision at the time.

Q. Would it be in about the same proportion, should you think?

A. Well, no, I would not like to say whether it would or not,

because the conditions as to holders and plant are constantly changing.

Q. Did you consider the book value in 1902 represented substantially the value of the plant at that time?

A. I considered it was very nearly the value of the plant.

Q. But you think to-day that the plant is some two million
1988 dollars more valuable than the book value, is that right?

A. Yes, sir.

Q. Is that based on any theory or advice of counsel as to how to treat values for the purposes of testimony?

A. No, because since 1902 changes have been made; we have built more gas holders and put in other apparatus and made changes.

Q. And the cost of those has been carried into the book value which has increased it from $15,465,000 up to $16,080,000, I think, to-day?

A. Yes, and it is also based on the fact that I do not think the works could be reproduced for anything less than that, whatever the book value might be.

Q. How much do you consider that the occupancy of land by your plant depreciates the value of the land?

Mr. MATHEWSON: I object to that. This witness has not been shown to be an expert on land value, and does not pretend to be, I suppose.

Mr. PAGE: He says he was instructed by counsel that he should only take into consideration such buildings as added to the value of the land, and in some particulars he considered the buildings depreciated the value of the land. Now I am just inquiring as to that particular statement of his.

The MASTER: He can answer.

A. As to amount I don't know that I can say, because in the first instance I would be obliged to place a value on the real estate, which I do not think I am competent to do; but I know perfectly well that a block of ground with a gas holder on it is worth less than it would be with the gas holder not on it, because whoever purchases it would have to remove the gas holder.

Q. If it has a gas manufacturing plant on it, anyone who
1989 purchases it will have to remove that, won't he?

A. Exactly.

Q. And so to that extent, you think the existence of the plant depreciates the value of the real estate?

A. Within certain limits.

Q. What limits would you say?

A. I suppose the assessed valuation would be less; the actual valuation might be the same.

Q. Well, then you mean that the existence of a gas plant on property is valued at a depreciating factor for taxation purposes?

A. Yes, sir.

Q. But not for any other purposes?

A. Not for any other purposes; that is what I gathered from the counsel's instructions.

Q. And what counsel was it that advised you?

A. The general counsel of the company.
Q. Mr. Sterling?
A. Mr. Sterling.
Q. Have you ever sold gas apparatus that was to be removed and used in other works?
A. Oh, possibly, yes, some small articles; I don't know that I can say exactly now.
Q. Well, there is no reason why a gas holder cannot be taken apart and put up again, is there?
A. If you do not mind the expense, no.
Q. Your purifying boxes——
A. I would like to continue that a little bit, Senator.
Q. All right, sir.
A. At the time the city took away the large gas holder at 18th Street station, I made a very exhaustive estimate as to the cost of taking that holder down and erecting it in another place for our own use, and I found that when I got to the end that I could—by the time I had my gas holder and tank taken down and the sheets all marked and transported to the place where it was to be re-erected, that I could put new material on the ground for the same price.
Q. Well, take the purifying apparatus, for instance.
1990 A. The same is true of purifying apparatus.
Q. Is that true of all gas making apparatus?
A. Practically all with the exception perhaps of an exhauster, or engine, or some small piece of machinery that can be taken up bodily and transported. Any piece of apparatus that you must cut in parts or take down and re-erect is under that same category.
Q. The sale of apparatus at 18th Street and 111th Street was merely a sale of scrap, wasn't it, and it brought its scrap value?
A. Well—no, I don't think it brought in scrap value practically. The city sold it. It was sold by the City Auctioneer and I would assume that he got the best price for it that he could.

By Mr. MATHEWSON:

Q. Was that sold at auction as it stood?
A. Sold at auction in both cases.

By Mr. PAGE:

Q. In this estimate of value that you prepared in 1902 was the 18th Street plant valued?
A. The figures taken were the book values. If the 18th Street plant was in the book value it was used, otherwise not.
Q. What can you say as to whether 18th Street was in the book value in 1902 or not?
A. I should say I don't know.

Mr. MATHEWSON: Do you want any concession on that point, Senator?
Mr. PAGE: Yes, I will take it. I suppose you are willing to concede that it was, are you not?

Mr. MATHEWSON: Yes, there is no doubt about it. It had
1991 not yet been condemned. It was not in operation. We had not been paid for it and have not yet, for that matter.

Q. I do not suppose you will be able to state at what value that 18th Street plant was carried on the books of the company at that time?

A. I cannot say, sir.

Q. When you got through and arrived at this result as the valuation of your plant, what did you feel that you had valued?

A. I felt that I had valued the plant of the company for taxation purposes.

Q. And when you make your valuation of to-day of $18,321,000 you feel that you have made a valuation for testimony purposes fixed on the question of the cost of gas, is that it?

A. No, sir, I made it in testimony, but not for testimony purposes.

Q. In both instances you disregarded entirely the book value?

A. No, I did not disregard the book value, for I used that as a basis to start with, and divided it by two and worked up from that.

By Mr. MATHEWSON:

Q. You mean in 1902?

A. 1902. In the case of the last estimate I paid no attention to book value.

By Mr. PAGE:

Q. You did not take book value and add 20 per cent?

A. I did not.

Q. Just how did you arrive at this valuation of $18,321,000 for your plant?

A. I took the valuation of the coal gas plant at $400 per thousand daily capacity, and the water gas plants at $200 per thousand daily capacity, which experience has shown is not far wrong.

Q. What experience do you appeal to when you say experience has shown that to be not far wrong?

1992 A. Experience and general knowledge of what similar plants have cost and are worth.

Q. That is not taking into consideration the condition of the plant in any way?

A. It is taking in consideration the condition of the plant, because if the plant was not capable of producing that amount, you could not use that as a factor.

Q. You mean producing that amount of gas?

A. Producing that amount of gas.

Q. But it does not take in consideration whether it is such a plant as would be commercially worth reproducing?

A. I don't know that has anything to do with the case, Senator, I don't see where the connection is.

Q. No, probably not.

A. This plant is going on day after day, year after year, doing this work.

Q. But in making this estimate you did not take into consideration the fact whether or not it was doing its work economically?

A. Yes, our plants are doing their work as economically as any plants in the country.

Q. Well, the 14th Street plant, for instance, has direct fire retorts, of six retorts to the bench?

A. Yes.

Q. Do you consider that as economical a construction as full depth regenerative retorts of eight or nine to the bench?

A. So far as construction is concerned, yes.

Q. I am speaking about operation?

A. So far as operation, the benches that you mention would consume a little less coke.

Q. Use less coke and could be handled with less labor?

A. And handled with less labor.

Q. And would produce gas cheaper?

A. A little cheaper, yes, by the amount of labor saved and the amount of coke saved.

Q. Then I am to understand that this value that you arrived at had nothing to do with the physical conditions or practically
1993 had nothing to do with the plants as they exist to-day except the fact that they produce a certain amount of gas?

A. Except the fact that they were running every day all the time producing the gas that we wanted of a candle-power sufficient to conform with the law.

Q. But in arriving at your result you took the amount of gas produced and multiplied it in one instance by four hundred and in the other instance by 200?

A. I took the amount that the works were capable of producing in any one day.

Q. Yes, and that was irrespective of what the works themselves were?

A. Yes. You could treat my works in the same manner.

Q. Yes.

A. But given a plant that was all run down and of no special value either in production or in economy and I should probably reduce that figure somewhat if I was to make an estimate in the same way.

Q. Would you use $400 as the unit to ascertain the value of the Astoria plant and multiply twenty million feet by four hundred?

A. It is possible that I should do that after the plant is finished and in operation so I can see what it does. Just now I should not apply any figure to it.

Q. Assuming that your plant in Astoria produces what you expect it will, 20,000,000 feet, would you say it was a proper factor to multiply that 20,000,000 by 400 to ascertain the value?

A. Not the first 20,000,000 unit, no sir, I should raise the figure considerably.

Q. How much would you raise it?

A. I should raise it to $500 or $600 without any question. This is simply assumption now.

Q. Yes. Well take six hundred. That would bring the cost of the plant at Astoria to 12 million dollars, wouldn't it?

A. Right.

Q. And you have stated here that your entire value at
1994 Astoria including everything, would be some thirteen million dollars?

A. Exactly, but I think, Senator, if I am allowed to go on and build some more plants over there I can build them for less than that, because there was a lot of work done in connection with this plant that will necessarily be of value for succeeding plants, but it must be done now.

Q. Well, that work was done with the idea of having succeeding plants?

A. Exactly, and for that reason the work had to be done in connection with succeeding plants.

Q. In that estimate that you gave of thirteen million dollars there was $1,135,336.63 for land and there was over two million dollars for a tunnel?

A. That is correct, two million and sixty thousand dollars I think, if I am correct.

Q. $2,050,000?

A. Yes.

Q. There was grading $317,543.53.

A. Exactly.

Q. And dredging, $160.000, wharves, $190,000, land drainage $50,000, soundings and borings $200,000; 60-inch gas mains with pumping plant $620,000, lining of tunnel $600,000; besides tar extractor and washerhouse $167,583.03. That was included?

A. Yes.

Q. All of it would not be included in a plant when you come to estimate the value of the production at $400 per thousand cubic feet?

A. That simply illustrates what I said a few minutes ago, that the cost of much of this work would be spread over other works subsequently erected, but it must be spent now.

Q. Does it cost less to manufacture one plant that will produce nine million cubic feet of gas than it would two plants at 4,500,000 feet each?

A. That is purely a theoretical proposition and simply——

Q. Well we are dealing largely with theories, aren't we?

A. I am not, I am dealing with facts.

Q. Well, let us theorize on your facts, then. You take a
1995 unit of $400 as the value of producing a coal gas plant of any capacity. Now I say if you divide that in two plants, situated one at 42nd Street and the other at 14th Street, would it cost more to produce those two plants than it would to produce one plant, producing the same amount of gas?

A. It would, per thousand cubic feet.

Q. Yes?

A. Yes.

Q. Then is that unit of multiplication which you applied based upon reproducing a plant at 14th Street of 5,000,000 feet, and a plant at 42nd Street of 4½ million feet capacity?

A. Based upon the production of the plants as they stood, not with any idea of splitting them up into small units or combining them together, but taking them as they stood as a fact.

Q. Then your idea is that as these two plants stand, to reproduce them it would cost in each instance $400 per unit of thousand cubic feet capacity?

A. Yes, sir.

Q. That does not include real estate?

A. That does not include real estate. It includes buildings, so far as buildings are classed as real estate, but not land.

Q. If you were going to reproduce to-day a gas plant to produce the entire amount of gas that is now manufactured by the Consolidated Gas Company, would you reproduce these plants?

A. I think that question is answered by the very work I am engaged on now in the Astoria plant. It is not a reproduction of these plants.

Q. And the kind of apparatus that is in use in these particular plants is not the kind you are installing in Astoria, is it?

A. In many cases it is identical, absolutely identical, with the exception that it is larger.

Q. That I suppose would apply to the purifiers?

1996 A. Purifiers, engines, exhausters, condensers, meters, holders, and 90 per cent. is identical. The retorts are precisely the same, the horizontal retorts, with the exception there are two more in an oven; absolutely the same otherwise.

Q. Well, the full depth generator furnaces?

A. The furnaces are different in some cases. We have the full depth generator furnaces at 42nd Street to-day.

Q. You also have helf depth?

A. Also have half depth at 14th Street.

Q. Half depth at 42nd Street?

A. At 42nd Street, yes, sir.

Q. And at 14th Street you have direct fire?

A. At 14th Street, we have some half depth furnaces there which I have built since I was chief engineer.

Q. Well, you haven't done as Mr. Mayer did, taken an inventory of the property?

A. I have not.

Q. And estimated what it would cost to reproduce that identical property?

A. I have not.

Q. Have you made any recent inspection of the apparatus with an idea of making this estimate?

A. What estimate?

Q. That you have given to-day of $18,321,000.

A. Do you speak of mine or Mr. Mayer's?

Q. Oh, yours.

A. I have made no recent, absolute inspection for the purpose. I am familiar with the works and make inspections of them day after day, year after year. It is not necessary to start out and make a formal visit of inspection. I know it now.

Q. When you decided in 1902 to disregard the book value of the plant, did you take into consideration that the book value of the plant as entered on the books of the Consolidated Gas Company in 1884 was very much larger than the book value of the same plant on the books of the various constituent companies?

1997 A. I don't think it can be said that I disregarded the book values, because, as I said before, I started with them as a basis.

Q. But then you reduced it?

A. I did not disregard it. I reduced it.

Q. I wanted to know whether that fact had any influence on your mind?

A. If you will give me the rest of the question——

Mr. PAGE: The stenographer will repeat it.

The STENOGRAPHER (reading): When you decided in 1902 to disregard the book value of the plant, did you take into consideration that the book value of the plant as entered on the books of the Consolidated Gas Company in 1884 was very much larger than the book value of the same plant on the books of the various constituent companies?

Mr. MATHEWSON: I have to make objection to that. It appears affirmatively that it was not the same plant that was taken over from the constituent companies, and I don't see how the question could have any application. Those plants were never on the books of the constituent companies.

The MASTER: I will let him answer it.

Exception.

A. I took into consideration the figures of the book value of the plant, knowing that money had been spent on them, that they had been increased in capacity and efficiency. I must have known it was more than it was at consolidation.

Q. I don't think you have entirely caught my question. I wanted to know whether the fact that the plants as taken over in 1884 were entered on the books of the Consolidated Gas Company at a larger sum than they had been carried on the books of the constituent companies that consolidated, whether you took into consideration that fact?

1998 A. That is a question I cannot answer because I did not know that fact. If it was so I was not aware of it.

Q. In making this estimate that you have made for the value of the plant to-day you have not taken into consideration then the original cost of the plant and added to it the cost of such additions as have been made since?

A. No, I did not consider the original cost of the plant. That had no bearing whatever on the present value of the plant.

Q. You did not take into consideration the value of the additions that had been made under your own supervision?

A. Certainly I took them into consideration. A plant that in 1884 produced 25,000,000 and I know in fact they produce 51,000,000 now, I must have taken it into consideration. In other words,

there would have been no addition to the value if that remained the same.

Q. We have a plant in 1886 that produced 19,500,000 cubic feet of gas?

A. Yes.

Q. You did not take into consideration what it would cost to produce that plant and add to it $5,132,620, which you have expended in additions since to bring that up to a 51,000,000 cubic foot plant, did you?

A. I am not in the habit of doing foolish things of that kind, Senator.

Q. Well, you did not do that?

A. I did not do that, no sir, I should not think I was doing justice to myself, my company, or anybody else if I did.

Q. We have got an estimate here of $18,321,000, which does not represent the cost of it, it does not represent what it would cost to reproduce a plant of that capacity to-day, it does not represent the book value of the plant. Now what does it represent?

A. It represents my opinion of the value.

Q. Based on what?

A. On my knowledge and a long experience as an engineer and being competent to make those valuations.

1999 Q. Well, would this be the value of the plant new to-day?

A. It is my estimate of the value of the plants of the Consolidated Gas Company, their worth to the gas company as a gas producing apparatus capable of producing a certain amount of gas per day and bringing in a certain revenue.

Q. But it is not taking into consideration the question as to whether or not another plant could not be built that would produce the same revenue at a very much less cost, is it?

A. No.

Q. Now, as I understand, you took the value of the coal gas plant at $400 and the value of a water gas plant at $200; is that right?

A. Yes, sir.

Q. And you got 9,500,000 cubic feet—Oh, is this daily capacity?

A. Daily capacity.

Q. What daily capacity did you use for your coal gas plant?

A. 13,000,000.

Q. 13,000,000 what?

A. Cubic feet.

Q. Of coal gas?

A. Coal gas.

Q. Your estimate included then 18th Street?

A. Included 18th Street.

Q. Then you are reproducing more than you have got to-day?

A. Perhaps for an adjustment that might be eliminated.

Q. Well, we want to get at the idea you had. Now taking 13,000,000 of coal gas, multiplying it by 400; what do you get?

A. $5,200,000.

Q. What amount of water gas did you take?

A. I took 3,900,000.

Q. It must be more than that?
A. 39,000,000. I left off a cipher.
Q. Will you multiply that by $200?
A. That should have been 38,000,000 instead of 39,000,000. $7,600,000.
Q. $7,600,000?
A. Yes, sir.
Q. If you add those together you get $12,800,000?
A. $12,800,000.
Q. As against your estimate given here of $18,321,000?
A. That's right.
2000 Q. And if we take the $3,500,000 from the 18th Street, it brings it down to $12,200,000?
A. Yes, sir. There are some gas holders to go in there besides that.

By Mr. MATHEWSON:

Q. How about the oil gas at 21st Street? Is that in?
(No answer.)

By Mr. PAGE:

Q. You stated on your direct examination that the estimate that you gave at that time of $18,321,000 included apparatus, buildings and the gas holders?
A. I did.
Q. And I asked you how you arrived at that and you said by multiplying the coal gas plants by $400 and the water gas plants by $200?
A. So I did. So far as you asked me and as far as I went.

Mr. MATHEWSON: He has already testified that the twelve hundred and odd millions——
Mr. PAGE: Now, never mind, Mr. Mathewson, let the witness answer it.
Mr. MATHEWSON: But he has testified to it already.
Mr. PAGE: Never mind. We will straighten it out.

Q. What unit would you use then as a multiplier to get your holders in if you have left the holders out?
A. I did not leave them out. They were in there. I used $125 per thousand feet of capacity.
Q. For holders?
A. For all of them, by and large.
Q. Then in using $400 as a unit of multiplication to ascertain the value of the Astoria plant we would have to eliminate the
2001 holder also in our calculations to verify the correctness of your unit, would we?
A. Oh, yes, it would have to come out.
Q. What holder capacity did you multiply at $125 to produce the holder value?
A. 40,123,000.
Q. Is that the entire holder capacity?

A. No, sir, there are 503,000 to be added to that for the 18th Street holders taken by the city.

Q. Did you use that?

A. I used that. In my judgment that was the property of the company because it has never been paid for.

Q. The company will get interest on the award, won't it?

A. That don't pay the principal.

Q. What?

A. That don't pay the principal.

Q. Well, if they get the principal they will get interest with it?

Mr. MATHEWSON: I don't suppose he knows.

A. Some time, I hope.

Q. Since making the figures for taxation purposes based on the idea that the plant was going to remove to Astoria, you have very much modified your plans, haven't you, in regard to the removal of the plant, so that it will probably be a great many years before the plant is removed, if ever?

A. Well, yes, there is an uncertainty which has come into it since that time. The plans are not as well defined as they were three years ago.

Q. In the condition of the art, both of construction of plants and the manufacture of the product, a water gas plant is much more cheaply constructed and produces gas much cheaper than a coal gas plant, does it not?

A. The first proposition is right; it is more cheaply constructed for a given capacity. The second is not entirely correct. It was correct some few years ago, but the increasing difficulties of the oil supply and the reduction in quality and quantity and consequent in-
2002 crease in price, those things are bringing the cost of water gas pretty nearly to the cost of coal gas at the present time.

Q. It costs you to manufacture gas at the 14th Street station, according to the figures given by your company, 37 cents per thousand cubic feet. The cost at the water gas stations is about 29 cents per thousand cubic feet, is it not?

A. My answer was based on your question as to the state of the art, not speaking of any individual instance.

Mr. MATHEWSON: I think, Senator, you are wrong in your figures.

The WITNESS: Possibly he may be, I do not know.

Mr. PAGE: There is a possibility of course. You know I qualified that by stating "the figures given by your company."

Mr. MATHEWSON: I do not think you have quoted the figures accurately. I think you have inadvertently quoted the wrong figures.

The MASTER: How is it material? It has not affected the witness's answer. He says he has made the statement in view of the state of the art, and not with regard to a concrete instance at all.

The WITNESS: That was the question as I understood it.

Q. In the present state of the art, manufacturing in a modern up-to-date plant and making the recoveries of the by-product, as they do to-day, you say you can produce coal gas as cheaply as you can water gas?

A. There is another factor that comes in there; that is the illuminating power, the candle-power.

Q. Well, of the same candle-power?

A. Of the same candle-power, no, we can produce water gas cheaper.

2003 Q. I am of course referring to conditions as they obtain here in New York, not a general proposition, that you can produce coal gas unenriched?

A. Well, when you ask me a question of that kind, I must give you a straight answer. You simply say gas. Gas is gas, whether it is coal gas or water gas. When you come to candle-power, that is a different proposition.

Q. Well, modify the question to the extent of stating 22-candle-power, both coal and water.

A. 22-candle-power, both coal and water can be produced in my judgment some cheaper by the water gas method, but not so much as years ago.

Q. I understand that it is your expectation to build the Astoria plant entirely as a coal gas plant?

A. The present unit is a coal gas plant.

Q. Well, future units; how about that?

A. That is looking to the future.

Q. We have been doing a good deal of that?

A. I know; altogether too much.

Q. Well, we will cast our horoscope a little farther now.

A. The question as to whether I shall recommend the Consolidated Gas Company to build a water gas plant in Astoria next, or whether I shall advise them to keep on with coal gas plants, is yet in abeyance. I cannot say from the present standpoint what I will do.

Q. The original intention was to produce entirely a coal gas plant. Is that right?

A. No; my original intention was to have both coal and water gas.

Q. According to my recollection I thought you stated that before the Gas Commission.

Mr. MATHEWSON: I think your recollection is at fault. I think it was clearly testified—I know it was by Mr. Addicks—that it was contemplated to build a water gas plant there, or unit.

2004 The WITNESS: I have plans in my office showing water gas as well as coal gas. That is the best evidence.

Q. How is the gas that is manufactured by other companies under agency agreements delivered to your company?

A. It is delivered in two different ways. Some of it is delivered direct into our gas holders, and some of it is delivered direct into the mains.

Q. What companies deliver it to the gas holders?

A. All of them.

Q. What companies deliver it to the mains?

A. All of them.

Q. Where are the deliveries made to the mains from the different companies?

A. In the streets, various connections that we have. I do not

know that I can absolutely define where those are. Mr. Simpson can answer that question a good deal better than I can, as he has direct charge of that and I only have general supervision of it.

Q. Mr. Simpson is still to come on, so that I will not bother you about that. As chief engineer of the company, do you have records in your possession which show what it costs to produce gas at each station?

A. No, sir, I do not.

Q. You have general supervision of the production of gas, haven't you?

A. Yes.

Q. And it is part of your duty as chief engineer of the company to keep the cost down to the lowest effective point, isn't it?

A. It is.

Q. And don't you ever make calculations to find out if you are doing that?

A. I do not.

Q. If you want to know, to whom would you go?

A. Mr. Carter. My office is in the general office of the company, and the accountants and bookkeepers are all there, and if I want any information I simply ask the question and get it.

2005 Q. For the purpose of supervising the daily production, what reports are made to you?

A. To me personally none at all. Reports of the amount of gas made, the amount of gas sent out and the gas received from other companies come into my office and are there filed. I see them when I wish to for any reason.

The MASTER: I have been looking over this record very hard to find out what was brought out at the direct examination that this cross-examination is applicable to just at this point, but I do not seem to find it. Can you tell me?

Mr. PAGE: I do not know that it is, and if it does not seem to be productive, I will abandon it.

Mr. BURR: I want to ask Mr. Bradley a few questions if you have finished.

Mr. PAGE: I think so; go ahead.

Recross-examination by Mr. BURR:

Q. By whom was the statement prepared which has been offered in evidence to-day, which was presented by you?

A. Which statement?

Mr. PAGE: State's Exhibit V.

A. That was prepared in my office, under my supervision, by my assistants.

Q. From the books kept in your office?

A. From the books kept in the general office.

Q. And you know those figures to be correct, yourself?

A. So far as I have been able to check them over and examine them I have found everything correct, and I assume that the rest are.

Q. The plant at Astoria is to be an up-to-date and improved con-

struction, I understood you to say; it is not to be a reproduc-
2006 tion of the construction which at present exists on the Island of Manhattan?

A. That is my intention, to build the best plant in the world.

Q. Is it not a fact that improved instruction means cheapening of the cost of construction of gas?

A. I hope so, I hope to be able to produce it, but I will not sit here and state under oath that I am going to produce it cheaper; I intend to, that is my aim; but I may fail.

Q. In your opinion, when the Astoria plant is running it will result in a considerable reduction in the cost of the manufacture of gas?

A. I hope so.

Q. And would that extend to as much as 5 cents per thousand cubic feet?

A. No, sir.

Q. Do you recall being examined before the Gas Commission on that subject and testifying that it would result in a reduction of from 5 to 6 cents per thousand cubic feet?

A. I recollect that I protested against that examination, as I did not wish to be committed.

Q. Do you recall being examined before the Gas Commission and testifying that in your opinion the result of the construction of the Astoria plant would be a reduction in the cost of the manufacture of gas from five to six cents?

A. No, sir, I do not recall that.

Mr. MATHEWSON: He did not so testify; therefore he could not recall it.

Q. I call your attention to your testimony as it appears on page 746 of the printed record before the Gas Commission. You were asked this question?

"Q. Of course, when you get running smoothly and everything is as you have planned it to be, you anticipate a considerable reduction in gas? A. I anticipate a reduction.

2007 Q. To what extent? A. Perhaps to five or six cents a thousand."

Did you so testify?

A. I said perhaps five or six cents. I did not say that there would be a reduction of five or six cents a thousand feet.

Mr. MATHEWSON: Those were not questions which were put to the witnesses before the Gas Commission at all: that relates to questions which were put to him, and they were questions which were put to him before the Stevens Investigating Committee, and he stated before the Gas Commission that his testimony was misunderstood and he fully explained what he meant to convey before the Gas Commission. Those questions were not asked him.

Mr. BURR: These are the questions that appear here on the printed record.

Mr. MATHEWSON: Of course, they were read in by counsel for the

complainant before the Gas Commission, but he did not so testify before the Gas Commission. On the contrary he explained fully.

Mr. BURR: I do not think that calls for a statement on the part of counsel. The witness is entirely competent to take care of himself.

Mr. MATHEWSON: But you stated that that was his testimony before the Gas Commission; stated it flatly, and it is not so.

Mr. BURR: I have read the statement which appears on page 746 of the printed record.

The MASTER: I assume that you do not want to entrap him?

Mr. BURR: No, sir.

The WITNESS: I did not testify before the Gas Commission to that effect; the questions were not asked me.

2008 Q. So that we may understand each other, you did so testify before the Stevens Investigating Committee?

A. I did so testify before the Stevens Investigating Committee. I gave it as my opinion that there might be a reduction.

Q. Then, did you testify before the Stevens Investigating Committee, when you were a witness there before that body, as follows:

"Q. Bringing it down at the holder, cost of production at what? A. In the neighborhood of thirty cents.

"Q. A little less than thirty cents? A. Maybe a cent less than thirty cents.

"Q. Maybe a cent less than thirty cents? A. Twenty-nine."

Q. Did you so testify before the Stevens Committee?

A. I testified under the statement that it was entirely speculative on my part; that I had no data to go on to make that statement.

Q. The next question you were asked before the Stevens Investigating Committee was:

"Q. What are the circumstances which enable you to figure that reduced cost at Astoria? A. Better equipment; modern equipment, an endeavor to use all the modern appliances in the shape of labor-saving and recovery of some by-products that htve never been recovered by any gas company in this country, and little economies of that character; I do not know that I can enumerate all of them."

Did you so testify?

A. I did.

You were also asked this question before the same Committee:

"Are some of your present plants out of date and somewhat antiquated? A. Yes.

2009 Q. Which plants would you bring under that category? A. The 14th Street and 42nd Street plants.

Q. In what respect are they not up to modern standard? A. They have not the modern benches, so to speak, technically to speak, that is, the retort houses, and the balance of the apparatus is not as efficient as can be produced now."

Did you so testify?

A. I do not think you read that correctly as I recollect it.

Q. I hand you the book. Look at page 746. I would like you to read the testimony that appears there as having been given by you?

A. Well, this is what I was looking for; the next question:

"Which is the apparatus which is inefficient? A. There is none of the apparatus inefficient; simply comparatively inefficient." That is what I was looking for.

Q. You now remember that you so testified?

A. I did.

Q. You were asked:

"Q. I mean comparatively? A. In the case of the 42nd Street, the benches are the old style, horizontal sixes. When I say that I mean six in number. They are worked, drawn and charged by hand. The balance of the apparatus is fairly efficient, inasmuch as apparatus of that age and character can be built in the years when it was built.

Q. How old is the apparatus? A. I cannot say absolutely. I should say in the neighborhood of 35 years. I should say 35 years as nearly as I could arrive at it. I cannot give it any nearer.

Q. As I understand, that apparatus requires more labor
2010 than those perfectly modern appliances would require? A. It does.

Q. And that of course involves additional expense? A. Yes, sir.

Q. And brings up the cost of production? A. And brings up the cost of production."

Did you so testify before the Stevens Investigating Committee?

A. I did.

Q. Without any reservation whatsoever, you clearly remember that you so testified?

A. I testified with the reservation entirely all the time that it was simply speculative and now it is impossible to say.

Q. You mean when you say you have testified as I have read that you had the mental reservation as stated?

A. I always have a mental reservation when counsel asks me what I am going to do in the year 1910. I cannot tell exactly. I simply give him the best of my opinion.

The MASTER: Now Mr. Burr, what is this directed to as cross-examination.

Mr. BURR: On the question which I wish this chief engineer to answer, and which I am now proceeding to ask him, as to whether improved construction and up to date construction does not result in better gas and cheaper gas in its manufacture.

The MASTER: I know, but what on his direct is that suggested by? That you are making him your own witness now? I do not recall anything on his direct-examination that opened up that subject.

Mr. BURR: I think that he has given a statement here with regard to the cost of the plant at Astoria, and I think that I am entitled to show on this general subject of the manufacture and
2011 distribution of gas whether that plant, which is contemplated to cost so much, is going to result in the cheapening of gas, its manufacture and distribution.

The MASTER: I think that is a pretty far cry.

Mr. BURR: They are going to commence operations in a month or so; they hope to.

Mr. MATHEWSON: Will you let me see that page, if you have finished quoting from it?

The MASTER: I have got to take it, if you insist upon putting it down, but I do not see it on cross-examination.

The WITNESS: I will be better able to answer those questions a year from now.

Mr. BURR: Further, on the subject of the appraisal that he has made of the plant; he has stated it to be, in one breath, old and antiquated and I am going to call his attention the next minute to a statement made by Mr. Addicks before Mr. Justice Lacombe, as it appears on page 6 of the affidavits and notice of motion. On page 6 of the affidavits and notice of motion Mr. Addicks make- this statement:

"The manufacturing plants of the Consolidated Gas Company are in good and efficient condition; about four-fifths of the present generating capacity thereof are in shape, modern up-to-date water gas plants which could not be improved upon anywhere, and the coal gas plants, while possessed of some apparatus which is not of the latest pattern, are efficient and in shape to operate for an indefinite period without impairment of efficiency."

Do you agree with that statement?

A. That is correct.

2012 Q. Can you tell me what was the amount of gas consumed by the Consolidated Gas Company itself for its own purposes last year?

A. No, I cannot.

Q. Or the year before?

A. No; I have not any record which will show that.

Mr. BURR: I think that was one of the things I asked for, which has not yet been delivered.

The WITNESS: I was not asked for that, I have no record which would show it.

Q. In the Astoria plant, will you tell me what would be the weight of charges of coal in pounds used in the inclined retorts, if you can?

A. About from 1,000 to 1,200 pounds in the retorts.

Q. How many hours will be used to distil each charge?

A. That would depend upon the working of the benches, whether it is four or six hours; I cannot tell you until I get that under way.

Q. What gas would you average for a pound of gas distilled?

A. Probably 4.9 feet per pound.

Q. What would be the weight of charges used in the horizontal retorts?

A. 800 or 900 pounds probably; this is all dependent upon conditions as they come up, you know; I cannot tell that.

Q. You had it in mind when you estimated the output?

A. In a general way, yes.

Mr. MATHEWSON: These are through retorts, Mr. Burr, if that is of any value. Are they not, Mr. Bradley?

The WITNESS: Through retorts.

Mr. MATHEWSON: Through retorts, not single.

Q. What gas do you expect to average per pound of coal?

A. I just told you, 4.9 feet to the pound.

Q. If you were to have all your vertical and inclined retorts in operation at once how much gas would you expect to produce in twenty-four hours?

2013 A. I have never made the calculation. The house is rated at 10,000,000 feet; it may produce 13,000,000, or 15,000,000, or 8,000,000; it depends upon the working of the plant.

Q. What percentage of surplus retorts do you expect to leave out of work in ordinary work?

A. About 20 per cent.

Q. What station did you have charge of from November 1, 1884, to December 1, 1886?

A. What is now known as the 44th Street station, and the 99th Street station.

Q. What increase occurred in the capacity of those plants from November, 1884, to December 1886?

A. No special increase; nothing that I can recall now.

Q. I would like to ask you whether it is not a fact that land used solely for gas making purposes is not as valuable one year as it is another?

A. I am not a land expert; I cannot give you an answer to that question.

Q. Is the land that the Consolidated Gas Company took over in 1884 any more valuable for gas making purposes this year than it was in 1884?

A. I do not know, sir, I am not a land expert.

Q. I am speaking simply of gas purposes?

A. We do not make gas out of the land.

Q. You make it on the land?

A. We make it on the land, yes, and whether it is any more or less valuable for gas making purposes I would not like to undertake to say.

Q. If there was a gold mine under the land it would not make the gas any better or any cheaper, would it?

A. I would buy it then and I would not make any gas.

Q. Is it not a fact that for gas making purposes, the land is not any more valuable this year than it was in 1884?

A. I could not say.

Mr. MATHEWSON: Is not that a conclusion?

2014 The WITNESS: Yes, it is more valuable, I happen to think now.

Q. In what respect?

A. Because in several of the plants I have put a good deal more of apparatus on the same number of square feet, that makes it more valuable. We produce more gas per square foot of land than we did before.

Q. Is it more valuable in any other respect that you know of?

A. It is more valuable in that respect; as to any other respect I have no knowledge of it.

Q. Do you know what value or price the Consolidated Gas Com-

pany claimed for that part of the 18th Street plant taken by the city?

A. I know generally, yes.

Q. How much was it?

A. Something about a million dollars.

Q. What was the price claimed for the land and what was the price claimed for the buildings?

A. I do not know; I do not know anything about the land.

Q. You spoke something about the increasing difficulties of the oil supply and the depreciation in quality and the increase in price. Do you know what that is attributable to?

A. It is attributable in the first place to the production. Years ago when Pennsylvania oil was plenty, there was a larger percentage of the lighter bodies, naphtha and benzine, but as the years went on and the production of the Pennsylvania oil regions was reduced, the other oil fields that were discovered produced a heavier body of oil without so many of the light constituents.

Q. Whom did you purchase that oil from?

A. The Standard Oil Company.

Q. Many years ago?

A. Yes.

Q. How many years ago?

A. Since 1876.

Q. Have you purchased all of your oil from the Standard
2015 Oil Company since that year?

A. As far as I know.

Mr. MATHEWSON: Did you complete your answer as to the cause of increase in price?

The WITNESS: No, he interrupted me. The advent of automobiles, motor boats and gasoline engines, and all the various forms of use for the lighter products of petroleum have made it impossible for us to get it in quantity, and we are obliged to take the heavier product.

Q. Are you testifying now from your own knowledge or what somebody has told you?

The MASTER: Are you cross-examining on anything that he has testified to on the direct, or only on Senator Page's cross-examination, because we must come to an end of this some time?

A. Somebody told me, and I read it and I know it.

Mr. BURR: That is all.

Redirect examination by Mr. MATHEWSON:

Q. This State's Exhibit V which you have produced, giving the expenditures for certain items at Astoria, included all the items going into the Astoria plant, did it?

A. No, sir, only a portion of them.

Q. Even the first unit?

A. Yes.

The MASTER: He said that this morning.

Q. Why was this statement made up, giving these particular items?

A. It was made up because asked for by Senator Page, as I understand it.

Q. Have you in course of preparation another statement
2016 showing the items which were omitted from this?

A. I have.

Q. And which added to this make up $13,134,519.65?

A. Yes, sir.

Q. Senator Page has suggested certain items for deduction, which you said would apply not only to this unit but other units if they were built. Would not a portion of those items apply to this unit even if other units were built?

A. Undoubtedly.

Q. Then, in any event could the estimate of the cost of the first unit be wholly eliminated?

A. No, sir.

Q. You testified to a rope haulage system, coal storage yard and other items; are they included in these items in State's Exhibit V?

A. They are not included at all.

Q. And they would have to be added, would they not, to the $13,134,519.65?

A. Yes, sir.

Q. There is nothing in State's Exhibit V about the east purifier house or west condenser house or tar extractor or washer house?

A. Some of them are omitted but I think some of them are in there. The west condenser house is omitted entirely and condensing apparatus.

Q. The west purifier house and west tar extractor and washer house are included?

A. Yes.

Q. There appears here a holder, 15,000,000 cubic feet capacity. Is it possible to construct smaller holders than that at the same price per cubic foot of capacity?

A. No.

Q. Would it be more or less expensive?

A. The larger the holder the less expensive it is.

Q. Would you consider it judicious at Astoria, in view of the plans, to erect smaller holders than you are erecting?

A. It would be going backwards. In the city to-day we are taking out the smaller holders and replacing them with larger ones.

2017 Q. Are these figures in State's Exhibit V portions of the estimate of $13,134,000 to which you testified?

A. Simply a portion of it.

Q. You have stated that the generating capacity of the plants of the Consolidated Gas Company have been more than doubled since 1884. Was that increase effected in the same buildings?

A. Almost entirely.

Q. And it was not necessary to increase the buildings?

A. Very little more ground was covered.

Q. And what was the increase in generating capacity, chiefly?

A. In the case of 21st Street and 44th Street, it was in the generating capacity.

Q. Were the purifiers sufficient for a greater capacity than that of 1886?

A. No new purifiers were built. In 14th Street I put new sets in the old house.

Q. Is it possible where you have an existing plant or plants, such as the Consolidated Gas Company in 1886 had, with land, which is not covered with apparatus and building not fully covered, to increase the capacity without proportionately increasing the cost per thousand feet of output?

A. We have done so.

Q. When you speak of the salvage in case of the removal of the generating plants to Astoria as a few hundred thousand dollars, would that salvage be in the coal gas apparatus or water gas apparatus?

A. It would be in both to a certain extent.

Q. Which chiefly?

A. Mostly on the water gas apparatus.

Q. Were you informed by counsel in reference to the figures which you gave for the tax report of the provision of the law that real estate should be assessed at a price at which in ordinary circumstances it would sell?

A. Yes.

Q. And did you take into consideration what this generating apparatus would sell for if the plant were sold with it on?

2018 A. Yes, I took into consideration it would sell for scrap, and scrap only.

Q. Was that the theory on which you made up the figures?

A. That was the theory on which I made up the figures. Nobody else would want to buy it for a gas manufacturing plant.

Q. You have not ordinarily parted with any of your land or buildings for gas making plants?

A. No, sir.

Q. Would it be possible to acquire better apparatus in your judgment that that which you are now using for the manufacture of water gas or are they up to date?

Mr. BURR: Objected to as purely speculative.

Objection overruled; exception.

A. No, sir; most of the water gas apparatus has been built within the last five years and is just as modern and up to date as any we would contract for to-day.

Q. As to your coal gas, you have stated that your regenerating furnaces are somewhat more economical in operation. How about the cost?

A. They would cost more to construct them.

Q. It would add to the capital?

A. Yes, sir.

Q. If you took $400 per thousand feet as your unit what would that make the cost of a twenty-million cubic foot plant?

A. $8,000,000.

Q. Do you expect that subsequent units can be produced at less than that?

A. I expect they can be produced at less than the twelve million or thirteen million dollars.

Q. Yes, but less than the $8,000,000?

A. Well, hardly, I would not like to say that we could get much below the $8,000,000.

Q. In your $400 per thousand feet which you applied as the value of the coal gas plant in Manhattan, did you not in-
2019 clude relief holders at the station?

A. All the relief holders at the station were included in every case.

Q. In the $400?

A. In the $400.

Q. And the holders which you have added were simply the other holders of the company?

A. Storage and distribution holders. The relief holders went in with the plant.

Q. And so with the estimate of the Astoria unit which you have given, the holder at the plant was included?

A. Yes, sir.

Q. Is the $18,321,000 which you have specified, what you consider it would cost to reproduce the plants to-day?

A. Yes, sir.

Q. It is then the cost of reproduction?

A. Cost of reproduction.

Q. Have you made any estimate of what should come off that for depreciation, if anything?

A. No——

Q. Knowing the condition of the plants?

A. With the exception, perhaps, of 18th Street.

Q. Well, leaving that out of account?

A. Yes.

Q. How much did you include in this $18,321,000 for 18th Street, both the manufacturing plant and the holders taken?

A. I cannot tell that, I do not think, without going over my figures. I took the three and one-half million production at $400, upon the plant.

Q. That would amount to how much?

A. $1,400,000. The holders I cannot say now, for I have not the figures of the capacity, that is in detail.

Q. If you cannot tell exactly, state approximately.

A. About $175,000.

Q. And that would make a total for the 18th Street plant as taken by the city?

A. No, sir; I think we are working at cross purposes. You say taken by the city?

Q. Yes, taken by the city, the portion taken by the city
2020 at 18th Street?

A. Oh, that is another thing. I understood you to say what was left. $1,903,000.

Q. And taking that out of your $18,321,000 would leave how much, excluding 18th Street on your figures?

A. $16,418,000.

Q. You state now that the plans of the company are not so well defined with reference to removing its manufacturing plants to Astoria?

A. No, sir.

Q. What is that due to?

A. To being unable to form plans until this business becomes settled down to some basis so we know what we can do.

Q. Do you mean the 80 cent gas Act?

A. 80 cent gas and all the other disturbances.

Q. What is your view as to the production of gas, as to whether it should be all water or all coal or a mixture?

A. I think it should be mixed gas.

Q. Considering the supply of oil and the course of oil as to price would you have considered it judicious to establish as the first unit at Astoria a water gas plant when that construction was begun?

A. No, sir, I considered that thing at length and concluded the best interest of all concerned, the company and the consumers and the City of New York was a coal gas plant at first.

Q. Does the raising from 20 to 22 candle-power make any difference as compared with coal and water gas and possible cost of production?

A. Yes, sir, that is one of the difficulties that I labor under now, being unable to know what I can do until I find out the candle-power requirements.

Q. In connection with the production of gas you know what material is ordered, I suppose, for that purpose, don't you?

A. I make requisitions for material.

Q. And is it your effort to see how far that material goes in producing as much gas as possible?

A. Absolutely. I have it watched very carefully by my assistants.

2021 Q. And the figures as to cost of items you have not in your department?

A. I don't trouble about the cost of items. I simply know if we use more coal than we did last month, the gas is costing more and I want to know why. And the same with oil and the various articles that go into the manufacture.

Q. When you speak of being able to produce at Astoria gas at somewhat less than you do in Manhattan, you refer to the cost of coal gas in Manhattan or water gas?

A. The cost of the coal gas in Manhattan.

Q. Would you undertake to say that you expect to produce coal gas at Astoria at a lower price than the cost of water gas at your station?

A. I don't think I will be able to.

Q. Now, in reference to the testimony before the Stevens Committee to which Mr. Burr has called your attention, the first question is where you were asked about the cost of gas at Astoria: "Bringing it down at the holder, cost of production, at what?" And in a later question which he read: "And brings up the cost of production" and your answer was: "And brings up the cost of production." Do you remember before the Stevens Committee statements were made showing the cost of gas production, which was a statement of labor and material?

A. Yes, sir.

Q. And then additional items of cost in the holder, which raised it a few cents?

A. I do.

Q. What did you understand when you said it might be 29 or 30 cents?

A. Cost of production.

Q. Not the cost in the holder?

A. No. I did not have anything to do with that.

Q. Did you so state to the Gas Commission in the testimony before them?

A. Yes, sir.

Q. As a matter of fact, the cost which you expected to re-
2022 duce at that time, so far as coal gas went, related to the year 1904, didn't it?

A. It did.

Q. And have you effected a reduction since 1904?

A. We have effected a material reduction already.

Q. Several cents?

A. Several cents.

Q. Do you remember whether you testified before the Gas Commission that you could not say that you could reduce the cost at all?

A. If I recollect the testimony, I said that I could not keep going on at that rate forever, keep on reducing.

Q. Was that under the 20 or 22 candle-power law that you expected to do that?

A. Under the 20 candle-power law.

Q. Mr. Bradley, this estimate of $13,134,519.65 was made up some time ago, wasn't it?

A. Made up in March last—March, 1905, I think.

Q. Have you within the last few days gone over the items again to revise your estimate?

A. I have.

Q. And have you now the statement to which I called your attention a few moments ago showing the items which were not requested by Senator Page and which go into the total of $13,134,519.65?

A. Yes, sir, the items are here now.

Q. Now, the final revision of your estimate which you have completed within the last day or two makes a total of how much, anything beyond the $13,134,519.65?

A. $160,000 in addition.

Q. Making a total of how much?

A. $13,250,739.60.

Q. Does this show exactly what the items are which go to make that up which are not included in State's Exhibit V?

A. It does.

Mr. MATHEWSON: I offer it in evidence.

Mr. PAGE: I would like to call the Master's attention to the fact that last July I asked that this information be furnished. A tentative exhibit was prepared and shown to me and I made sug-
2023 gestions as to the form that that should be put in. To-day an exhibit is produced and handed to me for examination, and then when I have completed my cross-examination the statement is made that it is like Colonel Seller's eye wash, there is one ingredient missing, and other statements are prepared and produced under redirect-examination.

I merely wish to call your attention to the unfair way in which we have been used.

Mr. MATHEWSON: It is not a very serious suggestion. Here are the items requested by Senator Page, and here are those not requested by Senator Page, making up expenditures, estimates and totals, and the total added up is $13,250,000. The total of the estimate originally was $13,134,519.65. It is impossible to state the omitted items without showing the additional $116,219.95. Whenever the estimates are revised, months apart, the probability is, of course, that some other slight item will have appeared, and that is the fact, and we cannot get away from it.

Mr. PAGE: My request was for all the details relating to Astoria.

Mr. MATHEWSON: No, sir; we have your request and we will show it, showing precisely what you asked for.

Mr. PAGE: And it shows the *bona fides* of the complainants. They take a statement which was made up for the purpose of having them segregate certain items, and limit themselves to that instead of giving the information they knew *are* desired, tempted by the insufficiency of my request, as they claim, to produce an incomplete statement.

It is not fair to the defendant.

Mr. MATHEWSON: Here is a copy of the request which
2024 Senator Page handed to counsel and which I handed to the company and we followed it exactly as far as possible, and showed the cost of each particular one of the items which he requested. We did not understand that we were asked to furnish more than that, and we furnished it in the form which he requested, and have now simply shown the items which were not included in the items he requested, making up the total to which Mr. Bradley has testified. There was no idea of doing anything except to accommodate the Senator.

The MASTER: Let us not discuss it. I suppose if he has not got all he wants he can put it in when he puts in his own case. If the facts are somewhere they can be brought out by some process known to law.

Mr. PAGE: I know, but I merely wish it spread upon the records as to the frankness with which we are met.

Papers received and marked Complainant's Exhibit 235.

Mr. MATHEWSON: As the city contracts are here, before taking up another witness for cross examination, I will be glad to offer one or two papers——

Mr. PAGE: You brought out one or two points on the redirect-examination that you did not touch upon on the direct. I wish to examine on them.

Recross-examination by Mr. PAGE:

Q. You say you have made a material reduction in the manufacturing cost of gas since 1904. Can you state just how much?

A. No, sir, I was informed of that fact by Mr. Carter, the general accountant, that we had made a reduction since 1904.

2025 Q. Did he inform you as to the number of cents which you had made? You said it was several cents?

A. Not as to the exact amount; several cents, as I repeated it.

Q. Those reductions were made with your present plants, 14th Street, 42d Street——

A. No, they were made by additions and improvements to our present plants.

Q. Well your present plant as it stands to-day at 14th Street and 42d Street?

A. I did not speak of 14th Street and 42d Street. I speak of the entire plant, water gas as well as coal gas.

Q. Since 1904 what improvements have you made in your water gas plant that would enable you to reduce the cost of production?

A. Changed the entire method of production both at 21st Street and 44th Street and 99th Street.

Q. Was not that done prior to your testifying before the Stevens Committee?

A. Part of it was.

Q. Well, was not all of it?

A. I think not, I cannot recall now. Well, it was done about that time.

Q. Has a part of the reduction that you made been made in your gas plant at 42d Street and 14th Street?

A. There has been no special reduction made there because there have been no special changes made there. It continues about the same.

Q. Then whatever reductions were made you should judge had been made in the manufacture of water gas?

A. In the water gas plants.

Q. But you stated in response to my question on cross-examination that with the use of the full depth regenerative retorts at Astoria that you expected to make some still further saving, didn't you?

A. We expect to make some still further saving over the old direct fire furnaces.

Q. Do you know how many pounds of coke you use at 14th
2026 Street station to carbonize 100 pounds of coal?

A. Not without going to the records, I cannot state from memory.

Q. Do you recall how much gas you produced at 14th Street statoin in the year 1905?

A. No, sir, I do not carry those figures in my head.

Q. I wish to show you State's Exhibit P which will give you the entire amount of coke produced at that station and the entire amount used under the retorts. If we take the number of pounds of coal carbonized and divide it by the number of pounds of coke used under the retorts we will get at it, won't we?

A. Very nearly.

Q. You expect to be able to manufacture gas certainly in this up-to-date plant at Astoria much cheaper?

A. I hope to be able to make it cheaper and I am going to do the very best I can. If I fail it won't be for want of trying.

Q. Well, from the experience of others your faith is based upon a pretty firm foundation, isn't it?

A. It is as certain as I can be of anything.

Q. What is the difference in the cost in the holder and the cost of the production of gas?

A. The cost in the holder is the cost of the labor and the material that are used to make the gas in either of the holders. On top of that are other charges that are not ordinarily incorporated in the cost, such as fixed charges, taxes and all such items as that which are not ordinarily considered in considering the cost of gas in the holder or the cost of production, I should say.

Q. The cost of production then becomes the cost through the station meter?

A. It is the bare production in the works, yes; labor and materials.

Q. And what has to be added for the holder cost is the investment in the holder?

A. Care and supervision of holder and investment in holder, taxes, interest and all other items that are properly chargeable.

2027 Q. It takes no additional labor——?

A. We don't deal with those in the works.

Q. It takes no additional labor to get the gas from the station meter into the holder?

A. It takes additional labor to get it out again.

Q. But it goes into the holder without any additional labor?

A. No, a man has to regulate it by valves; let it in, change it from one holder to another before it gets to the holder.

Q. In the items that appear on Complainant's Exhibit 235, that do not appear on State's Exhibit V, are there any items that it would be necessary to take into consideration to find the items that would enter into a ten million cubic feet capacity plant, other than appear on State's Exhibit V?

A. These items from $767,000, "items not requested by Mr. Page," are required for the plant. All of this is required for the first plant, with the exception perhaps, of the 60-inch main. That is a portion of that $620,000. It is all necessary, the piping, the pavement, the shops, all necessary for the first plant (referring to first page of Complainant's Exhibit 235).

Q. While these items are necessary to make a complete plant for operation at Astoria, they would not be necessary for the production of a plant without relation to the conditions at Astoria, would they?

A. Well, which one? If we had a plant that was entirely built we could put new apparatus into a house, if we had a plot of ground that was paved we would not require paving. But those things must come in with the construction of a new plant absolutely.

Q. You would not have this gas pumping station at Astoria if you had a ten million capacity plant situated in Manhattan?

A. We could not move ten million feet of gas without a
2028 pumping station, any more than we could twenty million. The gas must be pumped.

Q. Not if your holder is in the immediate vicinity of your distributing mains?

A. Most of the holders are in the vicinity of the distributing mains because they are hitched to them. Not if the works were in the vicinity of the consumption, I think you meant to say.

Q. That is what I said, and what I said was distributing mains. I did not say holders. What is this 48-inch piping, $40,000 on the first page of Complainant's Exhibit 235?

A. That is piping in the works for carrying the gas around the works.

Q. And if you refer to the last page of State's Exhibit V you will find "general connections 30-inch, 36-inch and 48-inch gas piping"?

A. Yes, some of it is completed and some of it is not.

Q. You have allowed there $43,248.39 for piping of the dimensions specified, that are yet to be furnished, on the last page of State's Exhibit V?

A. That is for salt water, sewer, tar and ammonia piping.

Q. Well, my point is directed to inquire whether the 48-inch piping on the last page of State's Exhibit V comprises the 48-inch piping on the first page of Complainant's Exhibit 235?

A. No, sir, it is not the first lot of pipe, because if it was it would not be in there twice, and that is impossible.

Q. It is additional 48-inch piping?

A. It is additional 48-inch piping at the Ravenswood branch. The 60-inch main I testified to and the 48-inch piping connect the whole thing together and make a working plant of it.

Q. And to estimate on the cost of producing the ten million plant outside of the Astoria conditions, it would not include the 60-inch main, the gas pumping station at Astoria, or the 48-inch piping, would it?

A. It would under similar conditions.

2029 Q. Well, I say eliminate those conditions, confine it exactly as to what the plant has cost to produce gas?

A. In London they went out of the city and went to Beckton, they laid miles and miles of large sized pipe. This is not the only place in the world where it was done; and the pumping stations at Bowcommon and Australia Road. It has always been done by large companies. There is nothing new about it.

Q. Did they remove the holders out of London when they established the works at Beckton?

A. They did not.

By Mr. MATHEWSON:

Q. Mr. Bradley, having given a twenty million dollar plant, is it impossible from an engineering standpoint to divide by two or pursue any arbitrary rule of that kind and say how much a plant or the apparatus in a plant of half that capacity would cost, without going into a computation on the subject?

A. It is absolutely impossible, as I have stated this morning.

Mr. PAGE: I am through.

Mr. MATHEWSON: I offer in evidence certificate of the Comptroller of the City of New York, signed by J. W. Stevenson, Deputy Comptroller, dated July 6, 1904, certifying to the validity of the contract for lighting the Borough of Manhatton from March 16th, 1904, to March 15th, 1905, attached to City's Exhibit 2A.

Received in evidence and marked Complainant's Exhibit 236.

Mr. MATHEWSON: There may be other Comptroller's certificates of similar character and Mr. Burr has kindly consented to
2030 have an examination made and produce them without taking time here to go over them.

Mr. BURR: If there are any such certificates attached to these contracts I will see they are presented here.

Mr. MATHEWSON: Or if there are any which are not attached but which have been executed by the Comptroller, relating to the contracts.

COLIN C. SIMPSON, recalled for cross-examination, testified as follows:

Cross-examination by Mr. PAGE:

Q. Mr. Simpson, when you were on the stand before you stated the entire mileage of the mains of the Consolidated Gas Company as 822.2 miles?

A. Yes, sir.

Q. I show you Exhibit 138 before the Gas Commission, which is the same as Complainant's Exhibit 86, with the exception that the first column, "Miles of Active Mains," has been omitted from Complainant's Exhibit 86. I call your attention to the fact that the mileage of mains as stated in 1905 was 795.47. That states it to be the miles of active mains?

A. Yes, sir.

Q. Making a difference of 27.2 miles. Now I wish to know which is the correct statement of your mileage of mains.

A. They are both correct. I stated the mileage. The miles of mains in the ground is 822.2. This statement is the miles of active mains. We have a certain mileage of mains, but where they are not in active use they can by very little expense be put in use again. Such mains are still on our books but they are not active. And this says here distinctly, "Active Mains."

2031 Q. Then all you have of active mains that are actually used in your business to-day is 795.47, that was used, I mean, up to the first of January?

A. If that statement is correct, yes, sir. I haven't it in my head. That is what active mains we have.

Q. Well, this was a statement furnished by your company?

A. I suppose it is correct.

Mr. MATHEWSON: It is undoubtedly correct as to what it purports to show.

Q. Your computation of value of mains as something over twelve millions of dollars was based on the active and inactive mains, the whole 822.2 miles?

A. Yes, sir.

Q. And you gave the same value to the 27.2 miles of mains that were not in use, as you did to those that were in active use?

A. Yes, sir.

Q. In arriving at your valuation of mains, exactly how did you proceed?

A. What valuation do you mean?

—. Well, we will take first the one that you testified to here, the twelve million dollars?

A. That was the reproduction value.

Q. Well, whatever you call it. That was testified to when you were on the stand the first time and gave this valuation of twelve million dollars?

A. Yes, sir.

Q. Will you state and give me your method of computation?

A. I took the cost of laying the mains under ordinary conditions; to that cost added the cost of new pavement as existing in the streets of Manhattan to-day on 90 per cent. of the mileage, that is because 90 per cent. of the streets of Manhattan are paved with new pavement at the present time. I then added for rock excavation 10 per cent. of the mileage at 1.75 cents per foot. I also added for engineering expenses, clerical expenses, city inspection, interest
2032 and wear and tear on tool- and appliances, obstructions on the street which would delay the work, serious obstructions met with underground, suits for damages and other undistributed expenses.

Q. And you stated that cost $12,636,150.04?

A. Yes, sir.

Q. How many miles or feet of one and one-half inch mains are now laid under asphalt pavements?

A. That I could not tell you, sir.

Q. Can you tell me how many miles of any size mains are laid under asphalt pavement?

A. I can tell you the proportion.

Q. No, but can you tell me how many miles of 6-inch main are laid under asphalt pavement?

A. I could not tell you without going into a very long calculation, without going over all the maps, and referring to the maps showing the asphalted streets.

Q. In arriving at your result here, you did not make that kind of computation?

A. I did not, sir.

Q. In arriving at your estimate here you did not make that computation?

A. I did not. We have mains on every paved street in Manhattan, and of those paved streets 90 per cent. are asphalted streets.

Q. Well, that you state. Now, what price did you allow for reproduction of a main under a macadamized street?

A. I treated macadam as old pavement, and I allowed the smaller price.

Q. How many miles of main have you got under macadamized streets in the City of New York?

A. Twenty-seven miles.

Q. That particular matter you did take into consideration?

A. I did, although it should have come into the other, because up until two years ago we paid for macadam pavement in the city $1.50 a running foot for replacing it, and all those mains that are under macadamized pavement were laid under that ruling, paying
2033 $1.50 per running foot; it makes more than $5.00 a square yard. It is dearer than asphalt.

Q. In estimating the amount that you should allow for paving, what size did you allow for the trench?

A. I can read it off to you. I allowed for an inch and a half and for two inches, 2 feet 6 inches, that is, when I say width of trench, I mean width of trench repaving. The trench would be 2 feet wide, and in repaving the trench the contractor is allowed 6 inches on each side above the actual trench. That is, a trench is 2 feet wide, and he is allowed to charge for 3 feet for trim on the side. They do not always charge that, the full 6 inches on each side; some of them do not; so I took the minimum that he does take, and allowed 3 inches on each side for trim. That would bring a 2-foot trench up to 2 feet 6 inches, and the same way down, only allowing 3 inches on each side. I might further say that if anything the width of trench as given in every case is too narrow, and I think anybody will bear me out, taking the most favorable conditions as to the size of trench.

Q. What size of trench did you allow for repaving for 2 inches?

A. The same thing as for 1½ inch, 2 feet 6 inches.

Q. How far does the 2 feet 6 inches cover the inches of pipe in width?

A. It is necessary to have the trench at least 2 feet wide to work in there. Some of that pipe in there is cast-iron pipe, and they have got to get down there and lay the pipe and caulk the joints and run the joints and have working room, and you cannot work in a trench less than 2 feet wide.

Q. I say, up to how many inches in diameter of pipe would that hold good?

A. 2 feet 6 inches for 2-inch, 3 feet for 3-inch, 3 feet for 4-inch, 3 feet for 5-inch, 3 feet for 6-inch. It is possible to work in a trench 2 feet 6 inches wide for all those sizes of pipe. When
2034 you come to the next sizes I have allowed the same for 8-inch, 10-inch and 12-inch.

Q. What size is that?

A. 3 feet 6 inches in each case. That is a 3-foot trench. For 16-

inch pipe I have allowed 4 feet; for 18-inch pipe the same, 4 feet; for 20-inch pipe I allow 4 feet 6 inches; for 24-inch pipe, 5 feet 6 inches; for 30-inch pipe, 6 feet, and for 36-inch pipe, 7 feet. In every case I figured it as if the trench was only in earth, and in rock it would not be much wider than that; it would not be possible to blast wider than that; you spoil too much pavement.

Q. Did you make any computation to ascertain how many miles of these different sizes were laid in rock and how many in dirt?

A. No, sir, I took my general knowledge of underground Manhattan and figured on that basis. I might say again that if anything I have taken almost too low a basis.

Q. You have information in your department or in the departments of the company, haven't you, to show exactly how many miles or feet of these various different varieties of mains were put down in rock?

A. No, sir; as to the mains that I have laid in recent years, that were laid under my direction, we might have that information, but the mains that were turned over at the time of consolidation and laid before my time, I know nothing at all about it; there was no record kept.

Q. Did you calculate for a new trench and for repaving in the case of each mile of pipe; did you make those computations?

A. You mean each mile separately, or how do you mean? They are different.

Q. Did you treat these as all to be laid in the different trenches at different times?

A. I did.

Q. A large number of these are laid side by side, are they not?

A. No, sir. You mean laid at the same time, side by side.

2035 Q. No, don't let us get on to that again. We had trouble enough with that when you were on the stand before. I mean not that these particular mains were laid at the same time, but if you were going to reproduce those mains?

A. I do not believe in any case, not with this mileage that I took here, that there are 15 or 20 miles that are in the same trench, of the entire total, or could be put in the same trench.

Q. I do not say that they are, but if you were going to put them down new, are there not some of them that could be put side by side?

A. If put down new?

Q. Yes, put down to-day.

A. I doubt it very much.

Q. Why?

A. There would be no object in doing that. Rather than put two or three mains in one trench we would lay one large main.

Q. And if you were reproducing this system to-day you would in many instances lay one large main to take the place of several of the smaller mains, would you not?

A. In some instances, yes, sir.

Q. Then you have taken the mains that have been laid at different times in the past 75 years in the City of New York, and esti-

mated what it would cost to relay those same mains under the pavements as they exist to-day?

A. Yes, sir.

Q. And in doing that as I understand you have not figured for the number of miles of the different sized pipes that would be under asphalt pavements, or under any of the other pavements, but have made a general estimate?

A. I have taken the actual mileage of mains that we have. I have taken the actual percentage of streets of Manhattan that are paved with asphalt, or with granite block on concrete, and have
2036 taken 90 per cent. as under asphalt, and the other 10 per cent. as under ordinary pavement.

At 5:30 o'clock P. M. adjourned to to-morrow, Wednesday, September 12, 1906, at 10 o'clock A. M.

Last Exhibits:

Complainant's 236.
City's 44.
State's V.

2037 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, WEDNESDAY, *Sept.* 12, 1906—11 o'clock a. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Page, Mr. Kirby, Mr. Burr.

2038 COLIN C. SIMPSON resumed and further testified.

Cross-examination by Mr. PAGE:

Q. When you testified before the Gas Commission, do you remember the valuation you placed upon the mains at that time, the mains of the Consolidated Gas Company?

A. I don't remember it, no.

Q. I show you page 1555 of the printed record, on which you state that at the price of pipe that prevailed in 1905 that the value would be $11,600,000?

A. Yes, sir.

Q. Has there been a substantial advance in the price of pipe since that time?

A. Yes, sir, between the time I testified. It shows on that sheet, you know.

By Mr. MATHEWSON:

Q. What sheet?

A. That large sheet.

Q. City's Exhibit 1 for identification?

A. Yes, sir.

By Mr. PAGE:

Q. That computation was made by you upon the mileage of mains that you assumed to exist at that time?

A. It was.

Q. Do you recollect what that was?

A. Yes, it was 822 miles.

Q. I refer you to page 1614 of the testimony, in which you say that the total mileage of mains was 880, and that you had been over 90 per cent. of those 880 miles?

A. Yes, sir. But without my knowledge at that time there was written off the books a good deal of mileage which would reduce it to 822 miles as I have here.

Q. But in arriving at the value of $11,600,000 you made
2039 your calculation upon 880 miles, did you not?

A. No, sir; on 822 miles.

Q. How could you make your calculation on 822 miles when you had before you 880 miles, and stated that to be the mileage and did not discover until afterwards that any portion of that had been written off?

A. I don't know. I have the mileage here before me that I made the calculation on. It is 822 miles; $11,687,466.41.

By Mr. MATHEWSON:

Q. Is that the same figure that appears——

A. I said there $11,600,000.

Q. What do you mean by "there"?

A. In that testimony before the Gas Commission.

Q. Well, if you had that 822 miles before you at that time, why did you state the mileage to be 880?

A. That I cannot say, sir. I say I made my valuations on 822 miles.

Q. Although you thought there were 880 miles, all of which you had been over or 90 per cent. of which you had been over?

A. Yes, sir. Those mains were in the ground and I had been over them. They were written off the books without my knowledge.

Q. In other words, the mileage of mains makes very little difference with your valuation, is that it?

A. Oh, no.

Q. If it is 880 miles it is worth $12,000,000; if it is 822 miles, it is worth $12,000,000 and if it is 795 miles it is worth $12,000,000?

A. It makes all the difference in the world. I am testifying now on the figures I took for that valuation.

Q. What did you have before you when you gave your testimony before the Gas Commission?

A. I really don't remember.

Q. Well, didn't you have a mileage sheet that showed 880
2040 miles of mains?

A. I doubt it very much.

Q. Doesn't it refresh your recollection to see that you testified before the Gas Commission that there were 880 miles of mains?

A. I might have testified that we had 880 miles of mains then. I don't say I did. But I might have testified to that effect without specifying that of that 880 some of them were disused mains that were not in my figures.

By Mr. MATHEWSON:

Q. And that had been abandoned?

A. Abandoned.

Mr. MATHEWSON: There is no doubt that there was that mileage of mains.

By Mr. PAGE:

Q. When you say you don't know whether you testified, or you might have testified, I refer you to your testimony.

A. I will say if I so testified.

Q. Well, I will read it to you:

"Q. Mr. Simpson, referring to the present mileage of mains of the Consolidated Gas Company, can you tell what the total mileage is, or approximately, if you have it in mind, what the new mileage is and what mileage represents new mains which have replaced old mains? A. The total mileage is a little over 880 miles. Of that 880 miles at least 90 per cent. are either brand new or put in condition to be as good as new mains. That is, they have been restripped, reexamined and recaulked, and in other regards, and, as I say, put in absolutely thorough condition."

That was your testimony. Now, upon that 10 per cent. of
2041 880 would be 88?

A. Whatever that testimony was, Senator, the figures I am testifying to now are the figures I gave you there to arrive at the value of 822 miles for the estimate of $11,600,000.

Q. Although you didn't know that the mileage was 822 miles until afterwards?

A. I do not say that I did not know.

Q. You have stated that you gave this figure 880 because you did not know at the time that a certain amount had been charged off, didn't know that at that time?

A. It had been written off the books, but I knew how much disused main we had, but in my estimate here I only took the 822 miles of mains we had in use.

Q. I understand what you gave in your estimate here, but what I

am trying to get at is upon what you made your estimate of $11,600,000?

A. On 822 miles.

Q. (Continuing:) When at the time you stated that the mileage was 880?

A. I can only refer to my sheet which has 822 miles on it.

Q. That sheet was prepared for the purposes of this case?

A. No, it was not, sir. That sheet was prepared last December.

Q. Well, now you have given another valuation for mains for the tax report, mains and services together, of a little over five million dollars?

A. I never gave that. I never gave any tax valuation at all for services.

Q. We will leave out the services—you gave some figure on which the tax valuation was based for the purposes of taxation?

A. On the mains, yes, sir.

Q. And that was a little over four million dollars?

A. I don't know what the total was at all. I know it was about that amount.

2042 Q. I believe your testimony in that regard is that you gave the number of miles of mains and the rate, and Mr. Carter made the multiplication as you remember?

A. Yes, sir.

Q. And as a result of the rate per mile and the number of miles that you gave him, the result of that was a valuation of about five million dollars, a little over five million dollars?

A. I really cannot say. I haven't the figures at all. If he took my figures——

Q. You have never heard those figures, have you?

A. I have heard.

Q. Then why cannot you say whether those are the figures or not?

A. Because afterwards there were some amounts taken off for depreciation that I never gave him at all.

Q. Well, do you remember what figure you did give him at that time?

A. I haven't it in my head now.

Q. Have you in your head the method that you resorted to to ascertain the value of the figures at that time?

A. I have, sir.

Q. State what that is?

A. I took the cost of the laying of a main of each size under favorable conditions.

Q. State what those favorable conditions were?

A. No rock, no extraordinary obstructions in the street, good soft earth, ordinary pavement or no pavement, and I didn't include anything for engineering expenses, clerical expenses, suits for damages, wear and tear on tools and appliances and such things as that.

Q. And I understand in arriving at the value of the mains for the purposes of taxation, as laid in the streets of New York, you assumed that they were laid in soft dirt as on a country road, did you?

A. No, I did not.

Q. Well, you state you took no valuation for pavements?
2043 A. I used my own judgment on what prices I should give at which the mains should be valued for taxation purposes.
Q. Did you seek the advice of counsel as to what was the proper method of arriving——?
A. I did not, sir.
Q. Then this was your own interpretation of the proper way of making up the returns for taxation, that you should disregard entirely the conditions under which the pipe was laid, and state the cheapest possible method of laying pipe in soft dirt and without pavement or with very cheap pavement?
A. Not absolutely the cheapest possible conditions, but extremely favorable conditions.
Q. Conditions that did not exist at all in the city of New York where the pipe was laid that you were valuing, is that right?
A. No, I don't know that either.
Q. Well, are there pavements in the streets of New York?
A. There are.
Q. Is there rock that you have to go through in the streets of New York, that you have to go through in laying your pipe?
A. Yes, sir, 10 per cent. is rock.
Q. Then you disregarded both of those pavements?
A. I did not disregard pavements. I testified I took either old pavement or no pavement.
Q. You took old pavement and you claim now 90 per cent. is new pavement?
A. Yes, sir.
Q. Therefore you disregard the conditions that existed, did you not?
A. I did not take the conditions that it would take to reproduce the mains. I took my idea of the cost of labor, leaving out certain items.
Q. Then that valuation is the valuation that you would place upon those mains as the cost to relay them?
A. No, it is not.
Q. Now, when you value mains for the purpose of taxa-
2044 tion, you assume that the mains are laid in soft earth and under very cheap pavements or no pavements at all, but when you come to place the value on mains for the purposes of this case, you assume that those mains are to be laid in rock and under the most expensive form of pavement, that is, asphalt?

Mr. MATHEWSON: Objected to. The witness has not sought anything. He has been called here to testify. He does not control the law as the company understands it to be. He has been asked whether that is the cost of replacement, and he has so testified. He has not sought anything.
Mr. PAGE: Will the witness answer or does he wish to adopt the answer of Mr. Mathewson?
The MASTER: Answer the question.

A. By no means. In one case I was asked what the mains could

be laid for. In the other case I am giving the cost to reproduce those mains at the present date. The conditions have entirely changed since the mains were laid.

Q. You differentiate then between the question of what it would cost to lay those mains and what it would cost to reproduce those mains?

A. I absolutely do, sir.

Q. Then am I to understand that the value you put of four million or five million—or excuse me, the value that was arrived at by a computation of the figures that you gave, which amounts to some four or five million, was merely the cost of laying the mains and had nothing to do with the valve of the mains themselves.

A. It was not the cost of laying the mains.

Q. Well, that was what you were asked to give, the cost of laying the mains?

A. I did nothing of the kind. I was asked to give for taxation purposes figures for which mains could be laid.

2045 Q. That is, for what they could be laid for taxation purposes, is that it?

A. Nothing of the kind; that was not said at all. For which mains could be laid.

Q. Well, laid at that time in the City of New York?

A. Under favorable conditions. The conditions I took at that time in the City of New York, I could and did lay mains for those figures that I gave, under the conditions that I gave.

Q. That is, that was the price that you could relay those mains for at the time you made the statement, which was 1902, is that right?

A. No, sir; it is not.

Q. Well, then what did you mean by your testimony?

A. I mean that I gave figures under which mains could be laid under certain conditions. Now I do not say that those mains were all laid under those conditions.

Q. Well, they could be laid under those conditions in a country village, but could they be laid in the City of New York?

A. They could be laid under those conditions in certain streets of the City of New York.

Q. Are those the streets under which they were laid?

A. There were some streets laid under those conditions.

Q. But were they or were not the mains laid under the conditions which you took when you estimated your value at the time?

A. Some of them were and some were not.

Q. And you assumed that for the purpose of taxation that you would take the very lowest price?

A. I did, sir.

Q. At which any mains could have been laid in the City of New York?

A. No, sir.

Q. And give that as the value of the entire system?

A. I did not take the very lowest price, sir. I took a low

2046 price in laying mains under very favorable conditions.

Q. Wasn't this a fair average you took?

A. It was nothing of the kind.

Q. It was not even a fair average?

A. It was a fair average for the mains laid under the conditions that I took.

Q. Well, were those fair conditions do you think that you took?

A. I think they were.

Q. I mean by that fair conditions to estimate the value of the placing of the mains?

A. I used my own judgment on that. Whether I am right or wrong is——

Q. Well, you are using your own judgment when you give the value now, whether you are right or wrong, or is it somebody else's judgment?

A. No, it is my judgment.

Q. The figures that you gave to Mr. Carter you say were not given after consultation with counsel?

A. They were not, sir.

Q. The figures that you have given here were after consultation with counsel, were they not?

A. After the figures were made up I showed counsel how I arrived at them.

By Mr. MATHEWSON:

Q. You did not receive instruction from counsel as to the method of making them up, did you?

A. Absolutely none.

By Mr. PAGE:

Q. Well, did you from any other officer of the company?

A. No, sir. I will say this, that in making up my figures I conferred with the officers of the company and told them what my ideas were and how I was going to make them up and they approved of the way they were made up.

2047 Q. Have you had any substantial increase in services in the past year?

A. No, sir; not in number.

Q. Do you remember what you stated the value of the services to be before the Gas Commission?

A. I don't remember, no, sir.

Q. Do you think there would be any difference from the value of the services that you have given here to-day?

A. Do you mean the services as laid or the reproduction of them?

Q. Well, I suppose we will have to say the reproduction value.

A. There would be considerable difference.

Q. That is, you would consider the reproduction value a great deal more now than you did before the Gas Commission?

A. No, sir, I said the conditions under which they were laid and the reproduction value.

Q. I am talking of the reproduction values given before the Gas Commission and the reproduction values given by you here. What conditions are there that would make it more expensive to lay services in 1905 than it would to-day?

A. There are not any conditions that would make it more expensive to lay services in 1905 than to-day.

Q. What is it that would make it cost more to relay those to-day than it did then?

A. What makes it cost more to relay them? I don't know that it costs any more. If you give me the figures I will know what I am talking about.

Q. But I want to get at the reasons before we take the figures?

A. I don't know that I gave figures last year, reproduction values that are less than they are to-day, than I am giving to-day.

Q. Well, if you did, did you make an error in doing so?

Mr. MATHEWSON: Isn't that a little extreme, before you find out whether they correspond or not? It seems to me a waste of
2048 time. It is to entrap the witness. If you show him the figures he can answer.

A. I will say this, if you give me the dates you are talking about in 1905——

Q. Yes.

A. Was it the spring of 1905?

Q. October 21st, I think was the date.

Mr. MATHEWSON: No, he testified in January, late in January, 1906, as to the cost of reproduction.

The MASTER: I think if you are going to try and impeach the witness by confronting him with some inconsistent statement, it is only fair that you should call his attention to it, Senator, and let him know what he testified to before.

Mr. PAGE: Don't you think it is fair to get at whether there was any change in the conditions?

The MASTER: That is not the point. You assume in your last question. You say, assuming that you did do so and so, would it be correct or incorrect? I think it is hardly fair to the witness.

Mr. PAGE: Well, I do not want to be unfair to the witness.

The MASTER: It has taken it a little in the realm of speculation because it does not appear yet that he did testify as you suggest.

Q. At page 1556 of the record before the Gas Commission, you said in answer to this question:

"Q. How about the $1,227,931.86 at which they appear on the books of the company? A. A very fair figure indeed."

Mr. MATHEWSON: If you will read the testimony you will
2049 find that that related to an entirely different thing, the original cost of installation. He also testified at that time as to what it would cost to reproduce the mains at that time, and the figures are absolutely identical with those to which he has testified here before this tribunal. He testified from the same sheet, as he has already said, that he now has before him, and from which he testified before this Master.

Mr. PAGE: I only find those two figures, one at page 1556 and another at page 1615. If there is any other than those two figures given, I would like to have it pointed out.

Mr. MATHEWSON: That is a clerical error in taking down the question. It had reference to the book value, as you will see by the question; it is $1,222,000 in one case and $1,212,000 in another. I used each one in my question, and they both related to the same item, and there has been an error of the stenographers in taking them down.

Mr. PAGE: I had not reference to the second figure at all.

Mr. MATHEWSON: The figure that he gave was of the cost of reproduction, $1,934,000.

Mr. PAGE: Where does that appear?

Mr. MATHEWSON: He was recalled. The testimony you have before you is the testimony where he was recalled.

Mr. Page: I want to be absolutely fair to the witness. I take the only figures I can find.

Mr. MATHEWSON: The book value as of October 31st, 1905, was $1,212,071.09, as appears by the exhibit in evidence, and that was the figure that I used in asking as to the cost of original installation, and which he said was a very low figure, in fact, $14 per
2050 service. At another place I asked him what it would cost to reproduce mains and services at that time under conditions prevailing in January, 1906, when he testified, and he gave precisely the same figures as he has given here before the special Master.

Mr. PAGE: Let us see; on page 1615 it says:

"By Mr. MATHEWSON:

Q. What in your judgment would it cost to reproduce the services at present in New York City under present conditions? A. Very close on to two million dollars."

Is that it?

Mr. MATHEWSON: That is it.

Mr. PAGE: Then he did not give the figure of $1,994,034.35?

Mr. MATHEWSON: I said he gave it substantially. I did not say he gave it to a cent.

Mr. PAGE: You said he had this sheet before him and gave those figures.

The WITNESS: That was as to the mains; I did not have the sheet before me. I gave that from my head.

Q. Then, would you say that the service would not cost any more to reproduce to-day than it did in 1905, when you testified before the Gas Commission?

A. The same number of services would not, no, sir.

Q. The services in the Consolidated Gas Company. You have already stated, I believe, that there has been no substantial change?

A. I testified before the Gas Commission that it would cost $1,994,000 to reproduce those services as of October 31, 1905. I testified here and I said about two million dollars, not having
2051 the exact figures before me, referring to the same date.

Q. Don't you just want to transpose that—that you testified before the Gas Commission it would be about two million dollars and here $1,994,000.

A. No, I do not think I do. I think I testifiedd here it would be about two million dollars.

Q. I do not know that this is very necessary, but if you will turn to page 291 of your testimony in this record, and also to the page that I have just called your attention to, of the Gas Commission record, you will find that you testified before the Gas Commission that it would cost about two million dollars and that here you gave the exact figures as $1,994,034.35?

A. If that is the case, then I was mistaken.

Q. There is your testimony there (shows witness page 291 of the present minutes)?

A. Yes, sir.

Q. Then it would not cost more to lay those services to-day or reproduce them to-day than it would a year ago, October 31, 1905?

A. For the same number and the same size of services it would cost slightly more on account of the additional new pavements being put down since that date; also on account of the advance in price of pipe and labor.

By Mr. KIRBY:

Q. Have you charge of the work of connecting up the services and meters of consumers?

A. No, sir.

Q. That is not in your department?

A. No, sir.

By Mr. PAGE:

Q. You have been referred to as the autl rity as to where the gas was delivered, from the various subsidiary companies, into the mains of the Consolidated Gas Company. Can you tell me where
2052 those gas connections are between the mains of the Standard and the mains of the Consolidated Gas Company?

A. Yes.

Q. Where are they?

A. The principal connection is at 132d Street and Broadway; there the Standard delivers gas into our 30-inch main; also into a 20-inch main going to Inwood, and at 125th Street and Fifth Avenue, and at 125th Street and Eighth Avenue through our connections between the New Amsterdam mains and the Consolidated mains, for the purpose of reenforcing the New Amsterdam pressure.

Q. That is, your gas goes into the mains of the New Amsterdam company?

A. Yes. At 130th Street and Fifth Avenue and 135th Street and Lenox Avenue; there is a connection at each place between the Consolidated mains and the Standard mains, also for the purpose of reenforcing the Standard pressure from the Consolidated mains. Those are practically all the connections we have at the present time.

By Mr. MATHEWSON:

Q. Except at the holders?

A. I am not testifying about holders; I was asked about mains.

Mr. PAGE: I asked as to the mains.

By Mr. PAGE:

Q. Where do you get the gas from the Mutual; how do you take that?

—. The gas from the Mutual—there is no gas taken into the mains of the Consolidated Gas Company from the Mutual at all.

Q. I say, where do you take it?

A. We have a 30-inch main between the 14th Street station and the Mutual works, and the gas is taken from the Mutual to the 14th Street station through that 30-inch main.

2053 Q. And delivered to the holders at 14th Street?

A. Yes, or sent further up town from there if necessary.

The Master: I call attention to the fact that this line of examination is not cross-examination of anything that was asked about on direct.

Mr. PAGE: That may be. I presume I am going ahead then under the pains and penalties, whatever they may be.

Q. You stated there is also some gas delivered by the New Amsterdam and the Standard to the holders of the Consolidated Gas Company?

A. Yes, sir.

Recross-examination by Mr. BURR:

Q. I want to ask if it is possible, Mr. Simpson, to prepare a list, from the books or data, of the streets, giving each block and its length in feet, and also the number of mains in that block and the size of each main?

A. I could do it by six months' steady work.

Q. You have the books in which that information is contained?

A. Yes, we have. We have books containing the mileage of each size of main, but as to the size of each block—we have maps, but that would have to be all scaled off and it would be out of the question, it would take months.

Q. Scaling?

A. Yes, you would have to scale every block in the City of New York, from the Battery to Kingsbridge. Every block in New York has four sides, and you would have to scale all four sides of every block in New York City.

Redirect examination by Mr. MATHEWSON:

Q. When you spoke of the 90 per cent. of the pavements of New York being asphalt, as I understood you to say in one answer,

2054 did you mean asphalted or improved pavement of one kind or another?

A. New pavement, what we call new pavement.

Q. Either asphalted——?

A. (Interrupting.) Asphalted or asphalt blocks, or wood blocks, or granite block on concrete.

Q. And the paving that you allowed in your estimate of the value

of mains, you stated was 3 inches wider in each case than the trench you would be obliged to dig?

A. Yes.

Q. So that taking the width allowed for repaving, the trench in each case would be 6 inches wider than the amount allowed for repaving?

A. Yes.

The MASTER: I think he has stated that before.

Mr. MATHEWSON: Yes, but the statement was not quite clear as to the width of the trench.

Q. Referring to Exhibit 168 before the Gas Commission, which is the same as Complainant's Exhibit 86 except as to the column relating to miles of mains, this exhibit showed, did it not, the average sales per mile of mains?

A. Yes, but I see by this item——

Q. (Interrupting.) I understand; but this Exhibit 168 did show that?

A. Yes.

Q. So that the mains used in that computation were the mains to which services were actually hitched up at the time?

A. Yes.

Q. That appears in this Exhibit as 175.47?

A. Yes.

Q. If I understand correctly, there are about 77 miles additional, or 880 in all, which were not abandoned mains, but at that moment were not attached to services.

2055 Mr. PAGE: I object to that as not stating the testimony that the witness gave.

Mr. BURR: I object to it also as suggestive and leading; and there is no such testimony.

The MASTER: He is entitled to lead him to some extent, of course. Ask him what the fact is about it.

Q. Were any of the 822 miles to which you have testified, and for which you have given a valuation, abandoned?

A. No, sir, not abandoned, they were disused.

Q. Beyond the 822 miles there were other miles of mains that were abandoned?

A. No, they were not abandoned, they were disused.

Q. I say, above the 822 miles?

A. Oh, above, yes.

Q. So that the amount of mains abandoned and not abandoned would be something over 880 miles?

A. Yes, sir.

Q. In your testimony as to the cost of reproduction of mains before the Gas Commission and before this tribunal, did you have before you the same sheet, City's Exhibit 1 for identification, which you have had to-day?

A. I did, sir.

Q. And were the values at that time made up as they then existed, that is, of January, 1906?

A. They were.

Q. Upon the mileage of mains that existed on October 31, 1905?

A. Yes.

Q. Now, in reference to the tax report, you have stated that the figures which you gave to Mr. Carter represented the figures at which you could lay some mains in some streets? Did that take into account the laying of mains in rock?

A. No, sir.

Q. Or any engineering expense?

A. No, sir.

Q. Would it, in your judgment, be possible to reproduce the mains to-day for the figures shown in the tax report?

A. No, sir.

2056 Q. Or services?

A. No, sir.

Q. Could they ever have been installed, in your judgment, at those figures, taking them all together?

A. No, sir.

Q. Your attention has been called by Senator Page to your testimony before the Gas Commission in which you stated the book value was a very low value for services. Upon what basis were you testifying at that time. What had you been asked, the cost of reproduction, or the original cost of installation?

A. The original cost of installation.

Q. And also, as to the book value of the mains you were asked a similar question, and you said that was a low value?

A. Yes.

Q. What did that refer to?

A. The cost of installation.

Q. The original cost?

A. Yes.

Q. Does that in any way modify your testimony as to the cost of reproduction on January 1, 1906, of the mileage as of October 31, 1905?

A. No, sir.

Q. Did you give any different testimony before the Gas Commission than that which you have given here, as to values?

A. None whatever, except that one instance where Senator Page said I said about two million dollars, and in one case I said $1,994,000.

Q. In the other case?

A. Yes.

Q. Would the figures that you gave Mr. Carter, then, for the cost of laying some mains in some street, be a fair average of the total cost of laying all the mains in the streets, mile for mile?

A. It would not.

Q. Was your testimony as to value or originial cost of reproduction or installation before the Gas Commission true, according to your best belief?

A. What was that?

Q. Was the testimony that you gave before the Gas Commission

and to which your attention is called, as to the original cost
2057 of installation, in fact true, according to your information and judgment?

A. It was.

Mr. MATHEWSON: If the Master please, I desire to offer in evidence one or two documents.

I have subpœnaed, if the Master please, and desire to offer in evidence, notice from the State Board of Tax Commissioners to the Department of Taxes and Assessments of the City of New York, of assessments of special franchises of the company for the year 1906, $31,900,000. Mr. Burr was not familiar with those facts and therefore he preferred that I bring the papers rather than to concede it.

Received in evidence and marked Complainant's Exhibit No. 237.

Mr. MATHEWSON: I offer in evidence from the assessment roll, real estate of corporations, City of New York, 1906, produced from the office of the Receiver of Taxes, the following entries on page 6:

Under the heading of "Owner or Occupant," Consolidated Gas Company of New York. See New York Gas Light Company, Manhattan Gas Light Company, Harlem Gas Light Company, Municipal Gas Light Company (Manhattan and the Bronx), Metropolitan Gas Light Company. The next column, under the heading "Description of Property," conduits, wires, mains, pipes, connections and tracks, Sections 1, 2, 3, 4, 5, 6, 7, 8.

Under the heading "Ward, Lot or Map Number," third column, 12.

Fourth column, under "Value of such Real Property," $1,500.

Under next column, "Tax, dollars and cents," 22.18.

2058 Under next column in which there is an entry "Value of Special Franchises fixed by State Board of Tax Commissioners," $31,900,000.

Under the next heading, "Tax, dollars and cents," $471,769.10.

Under the next heading, "Total Tax, dollars and cents," $471,791.28.

Under the column marked "Arrears," the word arrears.

I also read in evidence from page 15 of said assessment roll the following entries, Harlem Gas Light Company, Consolidated Gas Company of New York, under the heading "Owner or Occupant," next column, "Description of Property," mains, pipes and appurtenances, Sections 5, 6, 7, 8.

Under "Ward, Lot or Map Number" 602, under "Value of such Real Property," $845,000. Under "Tax," $12,496.70.

I also offer the following entries from page 21 of the said assessment roll, under the heading "Owner or Occupant," Manhattan Gas Light Company, Consolidated Gas Company of New York. Under "Description of Property," mains, pipes and appurtenances, Sections 2, 3, 4, 5. Under "Ward, Lot or Map Number" 600. Under "Value of such Real Property," $1,140,000. Under "Tax," $21,296.16.

I also offer, under the heading "Owner or Occupant," Metropolitan Gas Light Company, Consolidated Gas Company of New York.

Under "Description of Property," mains, pipes and appurtenances, Sections 3, 4, 5. Under "Ward, Lot or Map Number" 601. Under "Value of such Real Property," $1,210,000. Under "Tax," $17,894.69.

2059 Again, under "Owner or Occupant," Municipal Gas Light Company, successor to Municipal Oxygen Gas Light Company, Consolidated Gas Company of New York. Under "Description of Property," mains, pipes and appurtenances, Sections 2, 3, 4, 5. Under "Ward, Lot or Map Number" 603. Under "Value of such Real Property," $860,000. Under "Tax," $12,718.54.

I also read from page 27 the following entries:

Under "Owner or Occupant," New York Gas Light Company, Consolidated Gas Company of New York. Under "Description of Property," mains, pipes and appurtenances, Sections 1, 2, 3. Under "Ward, Lot or Map Number" 599. Under "Value of such Real Property," $1,080,000. Under "Tax," $15,972.12.

This assessment roll is not the assessment roll for the Borough of the Bronx, and would not cover any assessment of the Municipal Gas Light Company in that Borough.

Here a recess was taken until 2:15 o'clock P. M.

EMERSON MCMILLIN, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside?

A. New York City.

Q. What is your business?

A. Banker, among other things.

Q. How long have you been a banker?

A. 15 years.

Q. Is your place of business in New York City?

A. 40 Wall Street.

2060 Q. Have you had any experience in the management of public utility corporations?

A. Yes, 35 or 40 years.

Q. Have you ever owned or controlled any of them?

A. Very many of them, yes, sir.

Q. Including gas companies?

A. Many.

Q. In what sections of the country have you managed, owned or controlled?

A. New York, Ohio, Michigan, Wisconsin, Illinois, Texas, Alabama, Minnesota, and perhaps other States that I cannot recall now.

Q. Have you bought or sold public utility corporations, gas companies and electric?

A. I have bought a good many and sold a few.

Q. Are you familiar with the basis of return which is expected on the purchase of gas property upon the investment made?

A. Yes.

Q. According to your experience and your knowledge which you

have acquired in the business, what rate of return on the investment in the business is required to induce purchasers?

Mr. PAGE: Objected to on the same grounds as to similar questions asked Mr. Halsey yesterday.

Mr. BURR: We join in that objection.

Objection overruled. Exception taken by Mr. Page and Mr. Burr.

A. Of course the locality and the environment have much to do with it, but it would range at the start from 9 to 15 per cent.

Q. In the case of your long experience, what rate of return do you require on any investment in order to purchase?

The same objections, ruling and exception.

A. I would have to see in the near future, if not at the time of purchase, 10 per cent. or better.

2031 Q. On the value of the property devoted to public use?

A. On what it cost me to purchase?

Q. Would it in your judgment be possible to interest capital in the acquisition or establishment of public utility corporations of the character of a gas company with a less expectation of earning capacity than 10 per cent.?

Mr. BURR: I object to that as being speculative.

Mr. PAGE: The same objection.

Objections overruled. Exceptions taken by *by* Mr. Page and Mr. Burr.

A. Of course I can hardly say, but I would think that it is not probable.

Q. Is that based on your own experience?

A. Yes, sir.

Q. When you speak of an earning capacity of 10 per cent. do you mean to imply that the entire 10 per cent. be paid out in dividends or from securities?

A. No, sir, there might be none of it paid out.

Q. Or a part might be paid, and a part turned into plant?

A. Yes, sir.

Q. In reference to gas companies, what can you say as to the risks and hazards of that business as compared with other businesses, public utility corporations?

Mr. PAGE: I object to that; he has not been shown to be an expert.

The MASTER: Yes, he says he has managed and operated companies all over the country. I overrule the objection.

Exception taken by Mr. Page.

A. At present, and for the past two or three years, I have regarded them as almost extra hazardous, owing to the municipal ownership excitement and the disposition of legislatures and city councils to cut down the price of gas, the shorter periods for franchises, things of that character, and in some instances where the public themselves are permitted to fix the price by vote, as in the case in one city.

2032

Q. In estimating, or testifying to a return of at least 10 per cent.

necessary to interest investors, what sort of franchises did you assume that a company to which you have reference possess?

A. Those that I have purchased on that basis, or that I had in mind at the time I made that remark were, perhaps, better as to conditions than the average. Some of them were perpetual and some of them were perpetual and exclusive. One of the largest, perpetual and exclusive, had been litigated and had been settled by the Supreme Court. Others were of limited periods, but where there was a very kindly feeling towards the company. Those were properties that are now controlled by a holding company, to which I converted them. Others are very much more hazardous and are not in a holding company, and I did not have them in mind when I spoke.

Q. When you referred to 10 per cent. earnings, I presume you mean net earnings above cost of operation?

A. Net earnings above everything, every possible cost.

Q. Assuming that the franchises were not perpetual or were in litigation, would you consider that that would affect the return which would be expected if you were to invest?

A. Well, the scope of conditions that might exist is so tremendous that it might be that I would not give anything for it.

Q. It would not affect it favorably, at any rate?

A. I would not name a price that I would pay for stocks where it was open.

2063 Cross-examination by Mr. PAGE:

Q. You are the president of a corporation which controls a great many gas companies, are you not?

A. Yes.

Q. What is the name of that corporation?

A. The American Light and Traction Company is the chief one. I am president of another corporation which controls some.

Q. Do you expect the earnings of a gas company to be sufficient, as I understand, to pay 10 per cent. dividends on the stock?

A. I said 10 per cent. earnings.

Q. That is, that the earnings above the expenses should show a surplus of ten per cent.?

A. Yes.

Q. Now, would you reckon in as expenses anything more than the expense of producing and distributing the gas?

A. Everything that would be a proper charge against it in the manufacture and distribution, original expense, taxes, and the expense of keeping the property in proper repair for economical work—everything that would be properly chargeable to the profit and loss.

Q. By money invested I suppose you mean the amount of capital that is actually invested in the plant, do you not?

A. There I refer to the price that I would pay for the property if I were purchasing the property.

Q. What relation has that to the capital stock or bonded indebtedness?

A. Not necessarily anything.

Q. Then you mean, do you, the amount which you would pay

would represent practically original investment, if the plant was worth as much as originally paid for it, and if not, would you offer that?

A. I did not catch that.

Q. Well, a plant that had been in existence for a number
2064 of years and was probably more or less depreciated on that account; you would take its present condition in offering a price for it, without regard to the original cost?

A. I should not pay any attention to the original cost in figuring up its value. I should figure on what it would do, or what I would think it would do under our management, and, of course, take into consideration the character of the franchise and other conditions locally.

Q. And would you take into consideration the economy that your management and large experience in handling gas plants could introduce into this particular plant?

A. Yes, if there were any that I could see.

Cross-examination by Mr. BURR:

Q. Are you familiar with the names of the companies that were consolidated in the Consolidated Gas Company?

A. Can I give you the names?

Q. Do you know the companies that were consolidated into the Consolidated Gas Company?

A. Oh, do I know the names here, consolidated into the Consolidated Gas Company? No, only in a general way. You refer to the old consolidated, back in 1884?

Q. In 1884.

A. The New York, the Knickerbocker, the Metropolitan—there were several; they used to be familiar to me, but I do not know that I can recall them now.

Q. Do you know that the Consolidated Gas Company buys gas from companies called subsidiary companies—the Standard, the New Amsterdam and the Mutual?

A. I have seen that so stated, yes, sir; but I do not know it to be a fact.

Q. Were you at any time connected with those companies?

A. I was at one time connected with the Standard, and with the East River. I built the East River.

2065 Q. How long since?

A. It is ten years since I was connected with the Standard Company. I think is thirteen or fourteen years since the East River was built; pro[illegible]ly twelve or thirteen years.

Q. Are you a stockholder in the Consolidated Gas Company?

A. Never was.

Q. As I understand you, the price at which you would be able to dispose of stocks or bonds of public utility corporations is based very largely on whether they have the right to do as they please or whether the Legislature has power to interfere with them at all?

A. I believe it is recognized all over the United States that the Legislature can interfere; it is not in question.

Q. And according to your opinion or judgment, where the Legislature could not interfere, or where the people did not have the power to control prices, you could sell such stock better than you could under conditions where the people had control over the prices and the Legislature could interfere?

A. No, I think that gas stocks that have been steadiest in their value are those in the States, as far as I know, where there has been Legislative and municipal interference; that is in the State of Ohio.

Q. In a large city, where a gas company had a monopoly of the business, and the consumption *per capita* was the largest in the world, would you say that to sell the stock of such a company ten per cent. would be insisted upon by you or by your clientele?

A. Of earnings, yes, with present conditions.

Q. What do you mean by present conditions?

A. That is known in a very general way to all of us, but not in any way specifically—public feeling.

Q. A spirit of unrest as expressed toward public uitlity corporations?

A. A spirit of unrest, yes, that expresses it.

Q. You mean the dissatisfaction with public utility cor-
2066 porations generally?

A. I do not know whether it is dissatisfaction or not, but it is excitement and an effort by the political and municipal bodies to interfere with the management, and a disposition to fix prices, sometimes apparently without much regard to what it may cost. That tends, of course, to depreciate the value of the stock, to my mind. I would pay less for it under conditions than those that prevailed some time ago.

Q. That would be true of railroads, where discussion arose relative to the control of railroads by the government; for instance, the rate bill which has just been passed; that might affect temporarily the value or selling price of stocks and bonds of such railroads?

A. I think it did, yes.

Q. Would you desire to be understood as saying that a return of six per cent. upon the actual investment in the gas business was confiscation?

Mr. MATHEWSON: I object to that as a conclusion.

The MASTER: I will let him answer it.

A. Returns—do you mean an earning or a payment?

Q. First as an earning?

A. As an earning I would not care to have stock in a company that could not earn but six per cent.

Q. And now, as a payment?

A. Well, if it was earning enough, I would not myself be so particular as to what was paid. Most people would. Stock that pays large dividends would be more popular than stock which paid small ones.

Redirect-examination by Mr. MATHEWSON:

Q. When you say thirteen or fourteen years, in reference to the Standard, do you mean that you were connected with that
2067 company for that period, or since that?

A. No, it is that long since I was connected with it. I was only connected with it a few months as vice-president of the company.

Q. When you speak of ten per cent. on the cost of the property which you would purchase, as the return that you would require in order to interest yourself in it, if the company that you were purchasing was established in a large community and had a large number of connections and an established business and franchises, might you not pay more for it than the actual cost of the tangible plant?

A. Oh, yes; it might have assets that I would give a good deal for, outside of the plant.

Q. When you speak of what you pay for it, you refer to what you might have to pay to acquire the whole thing?

A. Yes.

Mr. BURR: To what he might have to pay?

Mr. MATHEWSON: Yes.

Mr. BURR: That is objectionable, because it is all speculation.

The MASTER: The same objection is open to a good deal of testimony on both sides.

SAMUEL L. BERTRON, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside, Mr. Bertron?

A. New York.

Q. What is your business?

A. Banking.

Q. How long have you been in the banking business?

A. Nineteen years.

2068 Q. Have you ever had any experience in the purchase or sale of public utility corporations, such as lighting companies?

A. Yes, a good deal.

Q. For what period?

A. For the last twelve years.

Q. Are you familiar with the selling prices of stocks and bonds generally of such corporations?

A. Fairly so.

Q. Do you know the rate of return which is required by investors to induce them to invest in properties like gas companies?

Mr. PAGE: Objected to on the same grounds as before stated.

Mr. BURR: Same objection.

The MASTER: Same ruling.

Mr. Page and Mr. Burr except.

A. The investor's point of view is ordinarily largely that of the banker's point of view; in other words the ordinary investor is gov-

erned quite largely by the character of the house that brings out an investment of that sort and their method of handling such an investment. We all have more or less a large number of clients that are governed by our recommendations.

Q. And in the purchase or sale, what rate of return is effective and what rate do you expect to receive upon your investment?

A. We never consider such a proposition unless it is earning as much as 8 per cent. and we expect to get more than that out of it. If we should buy one on that basis it would be because we knew we could very largely increase our income by our development of the property.

Q. Is this confined to your own experience or is that your information as to the action of others?

A. I think it is very general among those who have had experience.

2069 Q. And in case you found a business which was established and had connections with customers and franchises, would the amount which you pay for property be more than the value of the tangible property for the manufacture of gas?

A. Why, we don't consider so much what the assets of that particular property are worth when we buy. We take into consideration, of course, the amount of money necessary to put the property into the shape that we want it, and then above all else, the franchise situation, and whether or not the consumption can be largely increased or not; that, of course, being governed largely by the price at which it is selling. Those are very important matters.

Q. If it had an established business, would that be taken into your estimate of what you would pay for it?

A. Yes, but that is not likely, because we generally know about what we can do in a given community and we know what we can produce for, what the population is and what the ordinary consumption in that locality is.

Q. Would it, in your judgment, be possible to interest capital in the acquisition or establishment of a gas business on a less expectation of returns than 10 per cent. on the amount of investment in the business?

Mr. BURR: Objected to on the grounds heretofore stated.

Mr. KIRBY: We join in that objection.

The MASTER: Same ruling.

Mr. Burr and Mr. Kirby except.

A. That is general, and just now I think there is less disposition than at any time since I have been in the business to invest in gas securities, and I think it is very difficult just now to sell a property at any reasonable figure. Possibly the best illustration of

2070 that, if you desire me to make this statement, is in connection with the company of which Mr. McMillan is President. That company owns and controls a number of very successful gas properties and it is known to be well managed. The stock of that company sells to-day at about 113, and the company is earning between 17 and 18 per cent. on that stock.

Q. When you speak of the earning capacity being at least 10 per

cent., do you mean necessarily that dividends at that rate would be paid?

A. Oh, it is not a question of dividends. Everybody who knows the business is governed by the returns. No company can pay all it earns and be safely managed.

Q. Are there not many prominent railway systems whose stock is selling on as high a basis as nine or ten per cent. of the earning capacity of the system as it is shown?

A. Yes, the Atchison stock was being sold, for instance, until very recently, in the neighborhood of 90; it is higher now.

By Mr. PAGE:

Q. Do you mean that pays 90 per cent. dividends?

A. No, 12 per cent. He is speaking of earnings, I understand. Pennsylvania stock selling at about 140 showed last year about 12½ per cent. and that included a large deduction that had been in the way of interest charges, by reason of the great number of bonds that they have sold for improvements, upon which there is no return as yet, and I should think the Pennsylvania was a typical railway property, as it certainly has the confidence of the people in its management.

Cross-examination by Mr. KIRBY:

2071 Q. You have stated in purchasing a gas property you do not pay material consideration to what the tangible assets are worth. Did I understand you correctly in that?

A. Well, in a general sense, yes. They are considered, because to arrive at an earning there must be tangible assets there, and we buy it on its present earning basis, having in mind largely what we can do in the way of development.

Q. Upon what value do you base your ten per cent. earnings?

A. I don't understand you.

Q. You have stated that you consider that gas companies should earn ten per cent. over and above the expenses?

A. The price we should pay for them.

Q. And you base that ten per cent. on the price which you could purchase them for?

A. Yes, sir.

Q. Irrespective of the capitalization or bonded indebtedness?

A. Yes, sir; I do not care about that.

Cross-examination by Mr. PAGE:

Q. When you refer to these railroad companies earning 17 per cent. and 12 per cent., that is the net earning of the operating system?

A. As shown in their statement.

Q. Now, the road that you cited particularly, the Atchison, but a few years ago was in the hands of a receiver, was it not?

A. Yes, in 1894, some twelve years ago.

Cross-examination by Mr. BURR:

Q. What is the highest grade of investment at present in the United States?

A. You mean that brings in the lowest income?

Q. Yes.

A. Government bonds.

Q. Now, assuming that gas is a public necessity, and that a corporation has a monopoly of the supply of gas in the City of New York, and that the consumption of that gas is greater *per capita*
2072 than in any other city in the United States, would you still say that before you could float any stock of that company you would require ten per cent. on the price that you paid for the stock?

A. Well, your question in reference to the government bonds brings up a point that I think many fail to consider in arriving at an investment basis. Now, my judgment is that government bonds are selling entirely on an artificial basis. You see, they are required for the circulation of the banks, and so on. They must have them and certain other investments must be made in government bonds.

Q. What do United States Government bonds sell for to-day?

A. On a two per cent. basis, and the reason for that is that a bank taking them for circulation can make another certain profit for circulation. If they were simply governed by general investment conditions, they would not sell on such a basis, I do not think; in other words, it is no indication of the value of money in the open market.

Q. But the certainty of the return is just as fixed in the case of the company that I have spoken of as it is in the case of the government bonds, is it not?

A. You mean the New York City Gas Company?

Q. Yes.

A. I misunderstood your question. Be good enough to state it again.

Q. I say, assuming that gas is a public necessity, and that a company has a monopoly of the supply of that public necessity in the City of New York, where the consumption of that commodity is greater *per capita* than in any other city in the world, would you not say that the return, whatever it might be, on an investment in that company would be a certain investment?

A. Yes, if they have got to use gas, and nothing else is going to take its place, and if they have a monopoly. I mean by that if they have no encroachment, then it makes it a safe investment,
2073 and it would certainly sell on a better basis than the returns we have been discussing.

Q. So, in such a case as that it would not be necessary for you or your clients to be assured of a ten per cent. basis?

A. Not with sufficient guarantees to that effect.

Redirect examination by Mr. MATHEWSON:

Q. When you speak of net earnings in case of the Atchison and these other systems, don't you mean net earnings on the par of the securities?

A. I mean the amount shown to be earned on the stock.
Q. Over operating and fixed charges?
A. Over all charges.
Q. The Atchison Company which was foreclosed years ago was a different corporation than the present, was it not?
A. Quite.
Q. And the system is quite different to-day?
A. It has been thoroughly rehabilitated in the public mind, and also in its management.
Q. And in your reply to Mr. Burr in reference to gas in New York City would you not also have to take in consideration or to assume that a sufficient price would be allowed for gas to establish a proper return on the investment?
A. That would be a proper guarantee; yes, sir, certainly.

ALLEN B. FORBES, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. MATHEWSON:

Q. Where do you reside, Mr. Forbes?
A. New York City.
Q. What is your business?
A. I am a banker, member of the firm of N. W. Harris & Co.
2074 Q. They are in business in New York City?
A. New York City, Chicago and Boston.
Q. Have they had and have you had experience in dealing with securities of municipal corporations and public utility corporations, and other securities of that character?
A. We have dealt very largely in securities of such corporations.
Q. During what period?
A. The firm has dealt largely through its entire existence, for a matter of twenty-five years.
Q. Have you and your firm, either alone or in conjunction with others, had experience in the purchase or sale of public utility corporations?
A. We have had experience. Our business is primarily, and in fact altogether, the business of dealing in bonds, but we have had in connection with that a varied experience in connection with the purchase of properties and the prices at which they have been sold, &c.
Q. Are you familiar with the rates of return which are required by your firm and others of whom you have knowledge upon the purchase or the cost of utility corporations such as gas companies?
A. I am in a general way familiar.

Mr. PAGE: Same objection to this.
Mr. BURR: Same objection.
The MASTER: Same ruling.
Mr. Burr and Mr. Page except.

Q. Will you state what rate is required to attract investment in that regard?

A. I should say, calculating all the hazards which the conservative banks and investors calculate, that the net return which could be seen at the time of the purchase or within a very reasonable future should be at least 10 per cent. and in a great many cases it should be a great deal more.

2075 Q. Is it not a fact that some corporations which are not subject to the hazards of the public utility corporations, well known established corporations, pay more than 10 per cent., upon the price at which they sell?

A. I believe that that is the case.

Q. How about the United States Steel Corporation, preferred stock, two or three years ago?

A. I believe that that showed earnings considerably in excess of the amount stated.

Q. Did it not yield an income of something like 12 or 14 per cent. at its selling price?

A. That is my recollection.

Q. Would you consider that a less hazardous form of investment, the preferred stock of that company, than a gas corporation under present conditions?

A. That is largely a matter of opinion, I should think it was considerably less hazardous than a great many gas corporations.

Cross-examination by Mr. KIRBY:

Q. What do you consider the hazards which bring you to your conclusion of the return on the investment?

A. Well, in the first place, the gas business is to some extent an industrial business; quite a large production of the revenue of gas companies is derived from the sale of fuel; it is in competition with coal and it is in competition, looking ahead from a banker's standpoint, with some new form of fuel; I don't know what it is, but it has been variously discussed. It is subject also to new forms of taxation and increased taxation. I remember when franchises were not taxed in New York State. And now they are.

Mr. BURR: Is that a sign of progress?

The WITNESS: I am not prepared to say; I think perhaps it is. And the gas business fluctuates more or less with the general

2076 business conditions of a community. Gas as an illuminant also may be displaced; a good many people found it was temporarily by electricity, and it may be displaced by some new illuminant. The conservative banker should take all those things into consideration before recommending securities to his clients.

Q. Your new illuminant has not as yet been discovered, has it?

A. I believe not.

Q. And your criticism as to taxation applies to all corporations, doesn't it?

A. I think it particularly applies to public service corporations more than to any others.

Q. But no more to one public service corporation than another?

A. No, I think not.

Q. Your criticism as to fuel applies to all industrial corporations, doesn't it?

A. It does.

Q. Do you class a gas corporation as more hazardous than an ordinary industrial corporation?

A. No, not than the ordinary industrial corporation where conditions of franchises, etc., are satisfactory, but where conditions of franchises are not satisfactory, where the temper of the community is uncertain, I regard it as hazardous.

Q. In regard to franchises, don't you consider the question of whether or not the franchises had been tested by the court as to whether or not they are exclusive bears a very great influence upon the return to be expected on the property?

A. It does.

Q. And that if a corporation had an exclusive franchise and a monoply of the district in which it operated that its expected return and the value of its property would be greater than when it did not have such a monoply and such an exclusive business?

A. I think that is right.

Q. What do you base your 1 per cent. return upon?

A. Partly on the idea that you have got to have a certain return in order to get the money, that is considering the purchase
2077 of a gas corporation, for instance, and in order to get that money and have people feel safe in advancing it, you have got to have a margin above that which will take care of all contingencies, and there are all kinds of contingencies facing the conduct of the business.

Q. What do you mean when you say your money, the money which you have to actually expend to buy that gas business?

A. Yes, or which had been expended from time to time in building it up.

Q. In buying it and building it up?

A. In buying it and building it up.

Q. That would be the basis of your 10 per cent. calculation; in other words you would expect that company to earn over and above its running expenses——

A. Over and above its running expenses, including maintenance.

Q. Over and above its running expenses including maintenance?

A. Yes.

Q. Ten per cent. upon the amount of money that had been invested and in the purchase of the plant, and since that time in renewals and replacements?

A. Well, I would say on the reasonable value of the plant.

Q. What do you mean by that?

A. Well, the value of the property as you have indicated it, plus whatever value it had for good will and established business. A gas property starting in a new city would have to operate for a year or perhaps two years before it developed a business and would be without return for that time, therefore I should think it conservative to capitalize the loss of return that the people who built have experienced while it was being built up.

Q. But Mr. McMillan has testified that he expected a larger return during that period by reason of not having established a business. Would that be your conclusion?

A. I do not understand your question.

2078 Q. That where business had not been established you would expect more than 10 per cent. on your capitalization?

A. Yes, I would.

Q. So therefore you would not at the time of your purchase capitalize on a future value?

A. Well, I have not been discussing the question of capitalization.

Q. You would not pay for the property more than its value at that time?

A. I would not pay for the property more than what I thought was its value.

Q. As of the day of purchase?

A. As of the day it was purchased.

By Mr. BURR:

Q. What corporations do you group under the head of public utility corporations?

A. We group in our own business street railroads, gas companies and electric lighting companies under that head.

Q. Not steam railroads?

A. We do not in our own business. We regard steam railroads securities as an entirely different class.

Q. But you recognize that in another sense apart from your own business that steam railroads are also public utility corporations?

A. In a general sense, yes.

Q. What gas companies did you have in mind when you said that you found it was necessary to have this 10 per cent. assured before you could dispose of their bonds and stocks?

A. I should say in the case of practically any gas company.

Q. Have you in mind any special gas company that you have had experience with in the past?

A. No.

Q. This is merely a general statement covering existing conditions as you find them?

A. Yes, based on my own knowledge.

2079 Q. And where gas is a public necessity and a company has a monopoly of the supply of this necessity in a city such as the City of New York, and where the consumption *per capita* is greater than in any other city in the world, would you require such an assurance of ten per cent. as you would in the case of other companies you have in mind?

A. I think specific in the City of New York; I should.

Q. For what particular reason?

A. Because of the general tendency.

Q. Do you mean——

A. Towards reduction of rates, which is something which a banker has to consider; it bothers him; he cannot figure what the return is going to be.

Q. I understand. It is a tendency to be dissatisfied with the operation of public utility corporations, is that it?

A. It is a tendency to regulate them, which cannot entirely be gauged by a banker.

Q. A tendency to regulate them?

A. To regulate prices.

Redirect examination by Mr. MATHEWSON:

Q. If you were dealing with a gas corporation or for a gas corporation which had already an output greater *per capita* than any other city in the world, there would not be the same chance for increase, in your mind, would there, as though there was a very small output *per capita?*

A. No.

Q. And the opportunity of development in the future is a considerable element, is it not, in the price which you paid for the property?

A. Yes.

Q. You were asked whether if an company had an exclusive monopoly, to use my friend's expression, to manufacture and distribute gas in New York City or elsewhere, that would not make it more valuable. Would you not, if it had such a monopoly as that,
2080 expect to pay more for it when you purchased it?

A. Yes.

Q. In other words, the figure upon which you would expect a ten per cent. return would be increased; that is, the cost, by reason of that monopoly, would it not?

A. Yes.

By Mr. PAGE:

Q. Would you not be willing to pay a price that would show less than ten per cent. return?

A. If you could guarantee earnings, this would be a different proposition, but you are talking about the earnings from the operation and skill of the men operating this property, and taking into account all the contingencies of business and everything else. I do not believe that it is a conservative policy to reckon that an amount can be paid unless that amount is considerably less than the apparent earnings.

Q. You are familiar with the prices paid in the open market for Consolidated Gas Company stock?

A. In a general way, yes, sir.

Q. And you know that while it was paying eight per cent. dividends with gas at one dollar, that stock was selling at over 200?

A. I believe that is a fact.

Q. And that under the present law, at a price of eighty cents, the public is paying over 140 for the stock, although they have reduced their dividends to four per cent., don't you?

A. Yes, and I know further that there are many corporations that are not paying dividends at all which are selling their stock on the stock exchange.

Q. Do any of them sell over par?
A. I don't know.
Q. Well, you know that they do not, don't you? Stock
2081 that is not paying dividends and has not paid dividends for some time past, is not selling at par?
A. I would not think it would, but there are some odd things on the exchange.

By Mr. KIRBY:

Q. Not of a well-known recognized corporation?
A. Not usually.

By Mr. MATHEWSON:

Q. Do you know that the Consolidated Gas Company owns the greater part of the stock of the electric companies?
A. That is my information.
Q. And would not that fact and the prospect of the electric companies in the business have something to do with the value of stock?
A. I think it would.
Q. Referring to the fact that the Consolidated Gas Company's stock is quoted at 140 about, and paying 4 per cent., do you think it would sell at that price if its return were limited by law to 4 per cent. or there was not expectation of increase beyond that?
A. I think it is very doubtful indeed. I should not think it would.

By Mr. PAGE:

Q. The first information as to the fact that the Consolidated Gas Company owned the electric light companies came as the result of revelations before the Senate Committee in 1905, did it not?

Mr. MATHEWSON: Is that important?
Mr. PAGE: Yes, I think it is.

A. I don't know. I have known it for some time.
Mr. MATHEWSON: Everybody knew it for years.
2082 The WITNESS: I don't know when I first learned it.
Mr. PAGE: You tried to conceal it.
Mr. MATHEWSON: No, that is not true. Everybody knew it, it was common knowledge.
Mr. PAGE: The only point I was thinking of was that the stock sold at 220 or thereabouts long before it was known that the Consolidated Gas Company controlled the other lighting companies of the city.
Mr. MATHEWSON: That is not a fact. It was known years before the investigation, and the investigation didn't disclose anything except the exact amount which was held by the Consolidated Gas Company.
The MASTER: You need not waste any time about that.

By Mr. KIRBY:

Q. You stated that if the City of New York had by reason of its large consumption per capita given a value to the properties of the

gas companies, that you would take it that the future values were not apt to be as great as the present by reason of the conclusion that the consumption had about reached its limit. If you add to that the fact that there is a large yearly increase in the population of the city, would that in any way change your conclusion?

A. I beg your pardon, I did not state or did not mean to state that the fact that there was a large consumption here would make the value less in the future than it is at present. I simply acquiesced in the suggestion—and stated as my own conclusion that the fact that there was a large consumption per capita would not show such an opportunity for increase as a place where the gas
2083 business had not been fully developed and there was a small consumption per capita.

Q. But you would modify that conclusion if it was brought to your attention that there was also a large increase per year in population?

A. That is another element entirely.

Q. And that element you would take into consideration.

A. Yes, I would take it into consideration.

After Recess.

ALEXANDER C. HUMPHREYS resumed.

Cross-examination by Mr. PAGE:

Q. Mr. Humphreys, I believe you testified that your firm had been in the past engaged in the business of erecting water gas plants?

A. It is now very largely engaged.

Q. But not in this country?

A. We do not erect water gas plants in this country at present, no

Q. In regard to the pressure provision of the laws of the State of New York, that the pressure should not in the service mains exceed 2½ inches nor be less than one inch, you state that that is practically impossible of enforcement?

A. I do.

Q. Will you state why?

A. Yes, sir. The variation in pressure necessarily due to variation in demands by the consumer in a city situated as is New York would make it impossible to comply with those restrictions, and at the same time furnish the consumers with a sufficient pressure to properly operate the appliances in ordinary use. If you like, I will give some examples, because I honestly believe that the law never would have been passed had the subject been understood.
2084 We will take, for instance, even getting down to as gross a variation as the hourly output, whereas we have got really to consider the variations per moment, because it is only in a moment that the pressure gauge is observed, the output of the Consolidated Gas Company hourly for the minimum hour for the minimum day is about 450,000 feet. The maximum hourly output for the maximum day would be 8,150,000 feet. To show what that variation

that I have just referred to brings into the problem, if we were delivering all the gas through a single 48-inch pipe, which I do not claim but am simply using as an illustration, the total variation in pressure which is allowed under the law irrespective of any difference of level would in the case of a 48-inch pipe, that total variation of 1½ inches would be absorbed while that amount of gas, while the 8,150,000 feet, is passing through forty-eight feet of pipe 48 inches in diameter; whereas in the minimum case it would not be absorbed until it passed something over 15,000 feet, three miles. That serves as an illustration to show how the variations in output makes a demand upon the pressure regulation which is far beyond, in my belief, anything that even the ordinary engineer conceives of—I would not like to say that, I would like to take that out, as it might sound egotistical; but I mean that ordinarily the engineer does not conceive of, until he gets to studying the question in detail.

Q. Your illustration uses a 48-inch pipe to deliver the entire amount of gas?

A. Yes, sir, just as an example.

Q. And presupposes, does it not, that the pressure at the holder or at the station governor remains the same, remains stationary?

A. No, sir, it does not presuppose anything of the kind. It is absorption of pressure and that is where people go astray. It is actual absorption of pressure which is known in engineering as difference of head.

2085 Q. Well, you stated that the pressure would be absorbed under the maximum condition in 48 feet?

A. That is right, the passage through 48 feet.

Q. You mean that the resistance in the pipe would cause that loss of pressure in 48 feet, the friction?

A. I mean this, that the flow of gas through a main has been put in the form of a formula which is practically correct, which I can state if you wish me to state it.

Q. I wish you would.

A. All right. I will refresh my memory if I am not correct, but I think that is simple enough for me to remember, with a very poor memory; that the quantity will equal a constant multiplied into the square root of the diameter to the fifth power, multiplied again by the difference of pressure, (not the pressure as it is ordinarily stated, which misleads so many people,) and divided (all under the radical,) by the length of main and the specific gravity.

Q. It is a constant multiplied by the square root of the diameter——?

A. The diameter to the fifth power, and that again multiplied into the difference of pressure, that is p-sub 1 minus p-sub 2. That will illustrate it.

By Mr. MATHEWSON:

Q. Is that all under the radical?

A. Yes.

By Mr. PAGE:

Q. Do you mean that, p-sub 1?

A. P-sub 1 representing the initial pressure taken at any point you like, and p-sub 2 representing the pressure after it is delivered; in other words, p-sub 1 minus p-sub 2 represents the absorption of pressure, and that again is divided under the radical by the length of main and the specific gravity. Now the quantity is in cubic feet and the constant, I will give you its range, if you like.

2086 The pressure is given in inches of water, the diameter in inches, the length in yards, and the specific gravity with relation to 1 for air.

Q. Upon this formula there have been prepared tables, have there not?

A. Yes, sir, more or less accurate.

Q. Then in applying this formula, as I understand, you arrive at the result in delivering the maximum amount of gas which you have specified in 48 feet of pipe, the initial pressure of two and one-half inches would be absorbed below one inch?

A. Reduced to one inch.

Q. Reduced to one inch?

A. An absorption of an inch and a half in pressure.

Q. And if it is extended over 795 miles of mains, your initial pressure would have to be something enormous, would it not?

A. Enorr.. .s in any such case as that, yes.

Q. Well, the Consolidated Gas Company has 795 miles of mains. I think we have got that correct now, and all interlocked. To deliver the gas at the end of the system, what would have to be your initial pressure?

A. We would have to take into account all the initial pressures you have started with, all the sizes of pipes you are working on, a complication which no man living or that ever will live can figure out in advance.

Q. And which no formula could be used for?

A. No, but this formula serves as an example to show that this absorption of pressure is taking place all the time and to an extent which is not even appreciated ordinarily by engineers who are working on it.

Q. And by reason of that very fact does not a good gas engineer place his works at the lowest point possible in order to overcome by the levity of the gas somewhat this loss of pressure?

A. Unquestionably, the engineer who understands his

2087 business gets his works at the lowest point and would hope to have all the points of delivery uniformly higher.

Q. If on your pipe there are at regular intervals take-off- for supplying customers with gas, that goes to the reduction, doesn't it, of the pressure?

A. Yes.

Q. And if in this 48 feet of pipe you had services, that gas would flow to a greater distance under the same pressure, would it not, that is the pressure would not be absorbed in so short a distance?

A. Say that again, please.

Q. (Question read by stenographer.)

A. It would depend on the amount of gas, which amount taken

separately flowing through that pipe, and the addition of all the amounts absorbed to each different consumer, would be the total absorption.

Q. Well, you would not figure that it would be necessary to multiply the number of feet by one and one-half inches to ascertain the pressure in any given distance, would you?

A. Certainly not.

Q. What?

A. It does not enter into it that I can see.

Q. If your 1½ inches are absorbed in the first 48 feet, to send the gas another 48 feet you would have to have three inches pressure?

A. Certainly.

Q. That is what I mean.

A. Certainly.

Q. And to send it 144 feet you would have to have 4 inches pressure?

A. In proportion.

Q. And then to send your gas through a mile of main, under your theory, how many feet of pressure would you have to have at the station governor?

A. I should have to figure that out, sir. Now, you are going on to a different problem.

Q. No, I think it is the same problem.

A. It is not, sir.

Q. I think it is the same problem extended, probably?

A. Oh, no, it is a different problem entirely. Now will you repeat that question?

2088 Q. (Repeated as follows:) And then to send your gas through a mile of main under your theory how many feet of pressure would you have to have at the station governors? That is to produce at the end of a mile of mains, I mean, a maximum of one inch pressure?

A. It will take some time to solve it. It does not follow from what I have said at all.

Q. Well I make it 13 pounds pressure, Doctor.

A. I will tell you in a minute. It would take almost 164 inches for one mile.

Q. Well, is that correct?

A. 163 inches.

Q. Is that correct, that it would take less pressure, initial pressure, to deliver gas at the end of a mile of main?

A. I am not talking about initial pressure. I am talking about absorption of pressure. You can take your initial pressure as you please within reasonable limits.

Q. This 163 or 164 inches is supposed to be the initial pressure required to deliver gas?

A. It is not at all, sir.

Q. (Continuing:) At the end of a main a mile long, at one inch pressure there?

A. It is not.

Q. That was the question.

A. Well, we will put it in that shape.
Q. Well, what is this you have given?
A. That is the absorption of pressure; the difference of head.
Q. Well, if in a mile of main you absorbed 163 inches, you have got to have 163——
A. What was the original question?
Q. If an inch and a half of pressure is absorbed in every 48 feet of pipe, what would be the initial pressure required to deliver gas at one-inch pressure through a main a mile long?

Mr. MATHEWSON: So it would be one-inch pressure at the end of the main.
Mr. PAGE: Yes.

2089 A. It would be two and one-half inches. You would absorb an inch and a half and have an inch when you got through.
Q. That is in the mile you would absorb an inch?
A. No, wait a minute. 164.6 instead of 163.
Q. Well, that would be the initial pressure required, would it?
A. Yes, and you would start with 164.6 and absorb on the way 163.6. You would have one inch at the end.
Q. Would it make any difference whether the main was straight or whether it turned corners?
A. That is all worked on the basis of a straight pipe, in rough numbers, and sufficiently accurate for our engineering work, that each right-angle turn would take about 1/42 of an inch in addition.
Q. And that assumes that at the end of the pipe the pipe is open, that there is no obstruction there? That is, that there is where the take-off is to the customer?
A. It is not necessarily open, no; simply that the gas has an opportunity to pass beyond, so the absorption is stated up to that point. It is loss of pressure on the way. It is due simply to the passage through that pipe.
Q. Now if you have along that line of a mile of pipe, at regular intervals, service pipes that go to consumers and there is drawing off of gas at those pipes, does it require an increase of pressure or would that reduce the requirements of pressure?
A. Reduce. You have then simply the sums of absorption and the volumes would decrease as you went along.
Q. Now, if your pipe is on a gradual upward rise of, we will say 10 feet to each 700 feet of pipe, how much would that aid you and reduce the pressure required?
A. The amount it would aid you for a particular part of the——
Q. Make it 10 feet to a thousand?

2090 A. It would depend upon the specific gravity of the gas, and I would like to state here, which I should have done in the first place, that my original case was taken on a specific gravity of 65, which I thought would be a fair average for New York City. The lighter the gas the greater would be the difference. For instance, with a coal gas of a specific gravity of 45, the difference would be very much greater. As the gas gets lighter the differ-

ence is greater of course. Now you want to know for a thousand feet?

Q. Take the gas as delivered by the Consolidated Gas Company in the City of New York?

A. A thousand feet with a 65 specific gravity—of course I have to assume the figure—and that will vary unquestionably in the City of New York according to the mixtures—even with the same candle power it will vary. The difference in pressure in a thousand feet, due to the rise in elevation, will be 5.17 inches. There will be the same fall of pressure and the same loss of pressure in descending to another level if the ground happens to be broken up into uneven altitudes rather than a steady rise, or in plateaus. No matter what the conditions are, the element of variation will be introduced to that extent; either rising or falling that element will be introduced, irrespective of all other elements.

Q. Then as against this absorption of pressure in the pipes that you assume we have possibly the rise in elevation to help overcome it; and we have next the fact that in the City of New York at regular intervals services are in operation that would very much reduce the pressure, and then also where you have an interlocked system as you have here with the feeding in from other mains?

A. Unquestionably we could not get along without it, could not satisfy the consumers.

2091 Q. If there is an automatic governor, would that not work instantly upon the increase in consumption, reducing the pressure in the pipe?

A. I shall have to expand that question a little more, Senator.

Q. If you will expand it, as you like to have it, you may.

A. Yes, I will interpret it for you, and then if I am not right you can go at it again. What is the question?

The STENOGRAPHER (reading): If there is an automatic governor, would that not work instantly upon the increase in consumption, reducing the pressure in the pipe?

A. It would entirely depend upon the character of the automatic governor. I will try and tell you just what you want to know. The automatic governor will simply regulate the initial pressure, I mean it will regulate the pressure at the outlet at that particular governor and not an inch beyond. If the governor is set to give a certain pressure, it will give it at that point, whether the pressure varies at the inlet to the governor or not, as long as it is in excess of the initial pressure desired. Now, the problem that you have in mind is probably in connection with the working of a volumetric governor. You can so regulate that governor or have that governor so designed that as the pressure decreases it not only raises the pressure, but acts to put on weights to increase the pressure, but the result will be right at that initial point, namely the riblet of the governor.

In other words, the governor wouldn't do any more than a man can do with a valve in his hands with instructions to do so and so if certain things happened.

Q. But it will do that and do it instantaneously?

A. Yes, sir, if it is a first class governor, in good working order, which many of them are not.

Mr. PAGE: I think I will have to move to strike out that
2092 last part. I think it hardly a fair characterization. There is no question but what you will find a great many machines of any description that are not in first class condition.

The MASTER: Strike it out.

Q. Would it be possible, Doctor, to run a trunk main for a considerable distance and bring that into a service main—excuse me, a distributing main, and thereby increase the pressure beyond the point of the junction of the two?

A. Undoubtedly.

Q. By "boosting," as we might say.

A. We know it can be done because it is being done very largely in New York.

Q. So that is one way of overcoming the inequality of pressure?

A. That is one way of overcoming it.

Q. And maintaining an equal pressure?

A. No, sir; cannot possibly maintain it equally under any circumstances.

Q. Wait a minute. Maintain a more equal pressure?

A. That is one of the methods followed to maintain a more equal pressure and avoid greater variation and it is being done in New York to-day.

Q. Now, furthermore, it would be perfectly practical in the matter of gas engineering, wouldn't it, to have district governors which would regulate the pressure over quite a large area?

A. Not unless those districts are separated from each other. If you are going to have a district governor on a certain set of pipes, those pipes must be separated, if you are going to depend on that governor.

Q. And it is quite possible, isn't it, and practical, to isolate one section from another and to regulate the pressure in that section by means of a district governor?

A. Not in New York, sir. Decidedly unpractical as an
2093 engineering proposition. I don't know of any city in the United States that I have examined where it would be harder.

Q. Where it would be harder?

A. Yes, sir. Where it would give less results. I can explain that if you like.

Q. I would like to hear an explanation of that?

A. With the variations of level in New York as we now have to consider, the minute you commence to use district governors, you have to take in the change of pressure due to altitude and that is the primary reason for their introduction. In New York we have variation of level of about 250 feet. That variation is not, as in most of these cases where these governors are used, confined to certain districts of certain elevation, but the elevation varies very widely in the whole upper part of New York; and if we started out to do anything of that kind we should have to first decide what we would expect in a district to limit our variation to, as far as altitude is concerned, in each district. Suppose we should separate the mains of New York on the basis of having a variation due to altitude even of .24 or say

¼ of an inch, we should have to establish six different sets of mains; one set would run from the Battery to the Ship Canal to take in all the points of the first elevation, within the first 40 feet. We should then have to run another set from Canal and Bowery to Broadway and 34th Street, and so on up to the Ship Canal, because from the Ship Canal a short distance towards the Battery all levels are involved. In other words, you have the level of one foot, say, at the Ship Canal, or five if you prefer to put it so, and you have the ultimate maximum levels all involved within a very short distance of the upper part of the Island, so you would have to run almost up to the Ship Canal to take in that set of mains. The third set would be from 59th Street and Columbus Avenue and so on up on the
2094 West Side, nearly to the Ship Canal, almost to it. The fourth set you would run from the West Side of 116th Street and Amsterdam Avenue up nearly to the Ship Canal again. The fifth set from 165th Street to the Ship Canal nearly, and the sixth set from 173d Street nearly to the Ship Canal. In other words, you would have to have six distinct sets of mains, and the capital burden would be very much increased, and having put these different sets of mains in you would not then be able to supply your consumers with the pressure needed for their appliances and still keep within the law.

Q. Are you familiar with Butte, Montana?

A. No, sir, I am not.

Q. Do you consider that the city of New York is the most hilly city in the United States?

A. No, sir.

Q. Do you consider that the changes of altitude in the city of New York are greater than they are in any other city in the United States?

A. No.

Q. Outside of the territory extending from 110th Street west of Morningside Avenue, running from there on up St. Nicholas and Edgecomb Avenue, are there any substantial altitudes which you would have to meet, where gas has to be delivered?

A. Take the case of the very thickly settled district around 125th Street and Amsterdam Avenue: You have a range of five blocks with a change of level of 75 feet, and we go on four blocks more and the range is increased 38 feet more.

Q. Well, within the range of five blocks of 125th Street which way, or is it both ways?

A. At 125th Street we have a level of about 25 feet at Amsterdam Avenue; at 120th Street a level of 100 feet and at 116th Street a level of 138 feet, but that is not the worst of it; it is a question of hollows and knolls. You go north again from 125th St. to 135th Street and you have got 129 feet again, and at 138th Street only three blocks further we have got 148 feet. In the distance
2095 between the Ship Canal and 183rd Street we have got a difference of 251 feet. Now, it is not that we cannot control pressure due to the elevation in a district; it is due to the fact that those differences of level are scattered all over. You would have to

run to a starting point here with a pipe and cover the same district with another pipe.

Q. You know that at the upper end of Manhattan Island the Ship Canal ends practically in a bluff?

A. I am referring to streets. You take Broadway, and we find at 218th Street, just away from the Ship Canal, it has risen from five feet to 25 feet; and at 211th Street it has fallen to 18.75 feet; at Dykeman Street it has risen again to 20.67; a short distance beyond that it is 37.50; at 183rd Street it has risen to 251 feet again. In other words, it is ups and downs. I have used district governors with very great success and very great satisfaction to myself and——

Q. (Interrupting.) Well, now, outside of this territory which is practically the territory that I mentioned in my questions to you, outside of that territory, isn't the City of New York an ideal city for the delivery of gas, and no better?

A. I should not call it ideal, but as far as the elevation is concerned, it is not more difficult from any other city, but—well, the real trouble commences about 59th Street, for even there we have a variation, ups and downs, from one foot up to 76 feet, and a very great variation according to whether you go west or east. For instance, we have at Fourth Avenue and 34th Street 61 feet, whereas at First Avenue and the same street it is only seven feet. In other words, there is no regularity as to change of level. That is where district governors are not useful.

2096 Q. Feeding from a main carried up on the east side, your elevation toward the center of the island would help, wouldn't it, in regulating your pressure?

A. Unquestionably, no.

Q. Because the pressure of gas would help overcome the absorption of pressure?

A. Unquestionably no. Any variation as to altitude simply introduces an element of variation beyond our control. Where we gain in one point we must lose in another if there is a fall. And in New York we have those decreases in altitude as well as increases. It is not a question of pressure. We can get all the pressure we want, by simply putting on the pressure at the works, and that is the way we would run the works if we could, by putting on the necessary pressure; but it is not a question of gain of pressure; it is a question of reduction of variation of pressure, and that is where we cannot control the question. The laws of nature are against it.

Q. Does the company employ district governors on these bumps and knolls and ups and downs?

A. I think not.

Q. Well, while the company can get undoubtedly all the pressure that it wants in the pipes, does not the excessive pressure operate to the detriment of the consumer?

A. What would you call excessive pressure, for me to answer the question? Anything above 2½ inches.

Q. At what point of pressure do you get the best results from a flat flame burner, 22 candle-power gas?

A. You still have not gone far enough. If you will designate

the burner I might happen to remember for that particular burner and I may not. I will do the best I can to remember it.

Q. I mean the burners that are in common use, not the burners that are adjusted to pressure, which are not in common use but are used by scientists?

A. You will have to go still farther, Senator. There are a great many flat flame burners in use, and you will find engineers
2097 disagreeing as to which is the best, and they require different pressures. Not to quibble, I will say that you can get a first rate result with many kinds of flat flame burners with seven-tenths of an inch, and if we had nothing but flat flame burners to take account of, flat flames and Argands, the problem would be simple as to the maximum pressure to be used, and also the variation within the house.

Q. You produce the best results from an ordinary flat flame burner at seven-tenths of an inch pressure?

A. No, I did not say all of them; I said with some of them.

Q. What I am referring to is the ordinary burner in use in the City of New York, the kind that the Consolidated Gas Company distributed to its customers at one time out of its generosity. You are familiar with them, are you not?

A. I do not remember which particular burner that was. I suppose that some of the gentlemen here can tell me. That kind would vary, as I think has been indicated, as to candle-power.

Q. Well, take 22 candle-power.

A. All right, then we will define it as 22 candle-power. Then they will vary again as to the diluents of the gas. In other words, gases that do not make candle-power but which go to dilute it. According to the make-up of the gas, so will the pressure most desirable for a particular flat flame burner vary, but in round figures I can say that seven-tenths of an inch ought to be a pretty satisfactory pressure to give good results. If I were making photometrical measurements in my laboratory I should not take anybody's word for anything of that kind, but I would determine that from my own observation, as I have done repeatedly, and proved the tables to be wrong in many instances, in my individual work.

Q. Now, as the pressure increases on that same burner with
2098 the same quality of gas, the consumption increases, does it not? That is, if a burner at seven-tenths of an inch pressure burns five feet of gas, and you increase that pressure by an inch, it would burn much more gas, wouldn't it?

A. Yes, if unchecked.

Q. And if at seven-tenths of an inch it produces 22 candle-power of light, how much will it produce with the additional inch pressure?

A. That I would not generalize, sir, it would depend on the burner. For instance, many of these flat flame burners have what are known as checks in them, and those require a larger initial pressure, a greater initial pressure, because the burner is made——

Q. (Interrupting.) I am not referring to the Gray check burner; I am referring to the ordinary burner that is used, the one we have taken at seven-tenths of an inch.

A. Yes, but you have not gone far enough. You see I am talk-

ing about something that I know something about. Those ordinary burners that you speak of are very apt to have those checks in them. I am not speaking of governors, I am speaking of the ordinary fixed check, and many of those burners are actually designed with the checks in them and work under a certain pressure, so that the checks will take the swirl out of the gas so that it will come to the burner with an even delivery, and it needs a higher pressure for that kind of burner than it would for a burner without the check.

Q. I do not want the burners that are particularly regulated to keep down consumption, but the burner as ordinarily used by the consumer.

The MASTER: The common people?

Mr. PAGE: Yes, the common people, the plain people.

Mr. MATHEWSON: Those are the burners which we deliver,
2099 with checks largely. You wanted him to testify in regard to the burners that the Gas Company delivers.

A. I am not talking about laboratory results. Unless I am talking to a gas engineer I forget my laboratory unless for a particular purpose. I am talking about the burners that are being used, and there are more check burners used in the world to-day than there are unchecked, a good deal.

Q. And as the people come to understand the subject a good deal better, more of them will be used, won't they?

A. I tried to educate them up to that in my companies thirty-three years ago, and I think all the gas companies in the United States are trying to do it, issuing pamphlets showing the flames produced by flat flame burners under varying conditions, educational pamphlets that they are distributing, showing them how to save gas themselves, with the flat flame burner.

Q. We will disregard the Bray burners and the check burners and the anti-swirl burners, and come down to the burner used by the plain people, and which under seven-tenths of an inch, 22 candle-power, will produce the best results. Now, if you take that burner and increase your pressure by an inch, what would be the result on the illuminating quality of the gas?

A. Let me say first of all that we cannot disregard the swirl burners and all those things and come back to the burners used by the ordinary people, because I am talking about the burners used by the ordinary people. As I have said repeatedly, and I am not trying to quibble about any extraordinary burner, if you have a seven-tenths pressure on a burner and increase it an inch the effect would be to reduce the candle-power probably and the amount could not possibly be told until you took that particular burner and the particular gas to determine it by experiment.

2100 Q. But you have been for thirty odd years considering this subject, haven't you?

A. Yes.

Q. And you must in that time have made a number of tests and observations on this very point?

A. I have, but not any such indefinite and general point as you

have given. If you will give me a certain burner, and define it and give me a certain gas, put your question to me and give me a few hours, I will tell you what that particular burner will do, but when you generalize, as they do in such books as Newbigging and Hunt, &c., and say that such and such things do such and such things under such and such conditions, I can prove those tables to be absolutely wrong, and I have done so.

Q. Newbigging says that the greater the pressure the greater the consumption of gas. You will agree with him that far?

A. Certainly.

Q. Well, we will see if we cannot get on some general ground of agreement without adjourning the case for a test in the laboratory. As a general proposition, after you have increased your pressure above the point of greatest efficiency, you consume more gas?

A. For that particular burner.

Q. For that particular burner; you increase the consumption of gas and decrease its illuminating power, candle-power?

A. If you have been able to arrive at a specific point where you know you have got a maximum, as a rule there is a short range where you cannot detect the difference. But, going beyond that range, if you increase your pressure, you decrease your candle-power per foot. Of course that pressure can be regulated at the cock, and must be regulated at the cock by the consumer, for he has other appliances at the house which will need from 1½ inches to 2 inches to give him a result.

2101 Q. Now, we will come to that. Rapid variations of pressure are detrimental to the consumer, are they not? That is, he can adjust his cock of the burner to meet the pressure at one time, and then if the pressure is changed very suddenly within a very short time——

A. (Interrupting.) He would have to adjust it again.

Q. He would have to adjust it again?

A. Yes, and it would be an inconvenience and make a fellow mad. It would me, I know.

Q. And probably under the ranges of pressure that existed in the City of New York before our Gas Investigation, he would have to lead somewhat of a strenuous life running around to his burners to regulate his pressure and keep in touch with the frequent changes of pressure of the Company, wouldn't he?

A. That I could not say, because I am not aware that there are such variations. I am fairly familiar with New York conditions, and have been so for many years, and I have always supposed that the pressure in New York was excellently attended to.

Q. Three inches in an hour would be a rapid variation in pressure?

A. That would be a rather rapid change, yes, sir.

Q. The important point in regard to pressure, as far as it relates to the consumer, is that he should have the gas delivered to him at somewhere near equal pressure, is it not, if there -s to be any regulation on behalf of the consumer?

A. The desirable thing is to avoid variation of pressure.

Q. And the closer you can limit the range of pressure, why, the more advantageous it is to the consumer?

A. That is right.

Q. The object of the regulation of pressure being for the benefit of the consumer, the nearer the pressure can be kept at an equal flow to the consumer's apparatus, the better and more effective it
2102 is, is that so?

A. For both consumer and gas company, yes, sir.

Q. Now, you say that there is no such thing known in gas engineering science as a service main?

A. I never heard of it. Oh, yes, I have heard of it since the Stevens Committee—born of ignorance.

Q. That was the child of ignorance?

A. Fathered by misinformation.

Q. And born of the legislature?

A. Yes.

Q. That being the case, Doctor, it is the duty and prerogative of the Court to correct such errors as legislatures fall into. Now, as a friend of the Court—the criticism that you make of that phrase is the joining of "service" and "main" is it?

A. Yes.

Q. If we strike off the "main" and substitute "pipe" making it "service pipe" that would neither shock your ideas of propriety nor very much impress you with the ignorance of the legislature, would it?

A. The ignorance has already shown itself. No, there is no shock about it, anyway, but when I read anything of that kind I like to understand what it means, so that I can comply with the law. When they say "service mains," I do not know what it means.

Q. We will eliminate the word "main" and leave "service" now, if it said "service"——

A. I should have understood instantly.

Q. You would have understood instantly?

A. Yes, the trouble was that they tried to join up two things which are entirely opposed to each other.

Q. Now Doctor, I understand that you also criticise the provisions in regard to ammonia and sulphur of the legislative regulation?

A. I do in this sense, that I think the penalties are extremely severe, and as far as I know, have never been heard of before outside of his city. The tendency in England, of course, is at present the other way, to remove the restrictions entirely on sulphur com-
2103 pounds and ammonia. The London companies do not have to stand any penalties either for ammonia or sulphur compounds. They are only tested for candle-power and sulphuretted hydrogen, as far as penalties are concerned. The tendencies are rather the other way, to liberalize than to put any such thousand dollar fines on them.

Q. Then, the thing you criticise is not so much that the provision should not require a pure gas and a better gas, but that the violation of it is visited with a heavy penalty?

A. Yes, for the reason that it would be almost beyond the range of

possibility that companies should not at times fall within the limitations set by the law, even with all good management, and every desire to maintain the purity of their product.

Q. The Astoria Light, Heat & Power Company are constructing a plant for the recovery of cyanogen in connection with their production of coal gas. Would not that process absorb the sulphur very largely from the gas?

A. It would tend that way.

Q. And the more sulphur you have in the coal the more cyanogen you produce?

A. Not necessarily.

Q. You have given a valuation to this plant, Doctor, and you come to the conclusion that the book value of $16,080,000, odd, was about the right value, did you?

A. I came to the conclusion that it was not an over-statement of value, my inclination in the first place being that it was an understatement.

Q. That is, you think it would be worth a little something more than that?

A. Yes.

Q. Do you understand that the book value as stated is the value at which the Consolidated Gas Company entered the plant on its book in 1884 with such additions as have been made since?

A. In a general way. Before replying to that specifically I
2104 should want to go over the books myself and see every entry that had been made and see that that properly represented the book value without any writing off to reduce the value.

Q. Well, we will assume, which is in the evidence, that there has been no depreciation written off on the plant, and that the plant account was opened by taking the various plants of the subsidiary companies at their inventoried value, and that the additions to it had been of actual money expended in expenses and in additions to the plant?

A. Yes.

Q. Now, assuming that to be the condition, and $16,080,000 the result, would you say that that plant was worth more to-day than that figure?

A. I should say as my very best judgment, and having confirmed it by recent examination through my assistants, that the cost to reproduce that plant in its present condition, taking into account the depreciation just as we find it, would be more than $16,087,000. I feel perfectly certain of it.

Q. That is, to reproduce the identical plant?

A. Yes.

Q. If you were going to build a gas plant to-day of that capacity, would you reproduce those particular plants?

A. Probably not, in every particular.

Q. Well, it is certainly not, is it not, that you would not reproduce the plants as they exist to-day?

A. Yes, I think it is practically certain.

Q. That is, it would not be an economical or efficient plant, or as economical and efficient plant as you could produce to-day?

A. Probably not quite as economical as you could produce, some parts of it, but the largest part I do not think could be improved upon as far as efficiency is concerned, and as far as economy is concerned.

Q. That is water gas?

A. Water gas.

2105 Q. Which has been entirely rebuilt within the last two years?

A. Not to my knowledge it has not.

Q. 1904, wasn't it?

Mr. MATHEWSON: No, there was a lot of water gas before that, there was a great deal of water gas before that; not all of the water gas stations have been rebuilt or replaced in the past two years.

Q. Well, would you replace the coal gas with water gas?

A. I do not think I should. I know I should not.

Q. You would replace that with more modern apparatus which would be of greater efficiency and more economically handled and operated, would you not?

A. There would be a question to decide, as to whether it would pay to carry a much heavier capitalization to get in regenerator benches and the like, or whether I should put in a new plant.

Q. That is what we are talking about; reproducing that plant new.

A. Reproducing that plant new; the only practical change, as far as the generation of gas is concerned, would be to put in regenerator benches, and there we have to balance up, in regard to the residuals and the like, as to whether it would pay to put in the amount of capitalization for the saving in operation. Sometimes it pays and sometimes not. Some of the best engineers think it does not pay to put those modern appliances in. It might be decided both ways, according to locality.

Q. Is there any engineer that you know of that would recommend the placing of a direct fire retort in preference to a regenerative retort?

A. Yes, I think there are quite a number of them. They say it is a question of how much capital you want to put into it; balance up the pros and cons. General judgment of course would be in favor of regenerator benches, all other things being equal.

2106 Q. As I understand, you have not been all over this plant, as was done by Mr. Mayer, with your assistants, and this result is not the result of a computation as to the different elements entering into the plant?

A. My original statement was based upon my previous general knowledge of the plants, some of which I was quite familiar with, reinforced by an examination of all of them personally. From my wide experience, especially my wide experience in examining plants for purchase, I made up my mind that the price on the books was a moderate one. Since then the plants have been examined by my assistants in every detail, have been examined, but the figures have not been entirely completed. As I said the other day, my chief

assistant was called away by a sudden emergency and he is still away.

Q. How long a time was your assistant engaged in that work?

A. My chief assistant with two engineering assistants, two or three clerks and three or four accountants to help in figuring, were engaged night and day, practically Sundays and all, for about three weeks. And every important part of all the plants was examined.

Q. They took measurements, I suppose?

A. I presume they did. I have not had an opportunity to go over the work with them except to get this general statement from my chief engineer, which was sufficient to confirm me in my original belief.

Q. You do not mean to say that that plant is worth $16,080,000, do you?

A. I do.

Q. And would that be your testimony if it should appear that that plant cost a great deal less than that?

A. I would not care anything about it; if it cost 10 cents it would not affect my testimony a bit. I am taking the thing as I find it and judging it accordingly. What sort of bargains they may
2107 have been able to make in the past I don't know and don't care much about.

Q. Then if it should appear that this plant was built at less than $16,080,000 and a good deal of it had been in use for fifty-three years, you would consider it was more valuable to-day than when it was put in fifty-five years ago, would you?

A. I should not make any comparison that way. I don't know under what circumstances it was produced. I don't consider whether the plant has had money spent on it in the meantime. As I said, it would not affect my judgment at all. I take it as I find it.

Q. Then this plant as it exists to-day, having had money spent on it from year to year in the way of repairs and replacements, you consider to-day to be of the full value or more than the book value?

A. At least $300,000 more than the book value.

Q. Although it has been testified to by the company that nothing had been written off for final depreciation?

A. I don't know what they have testified, or I don't care what they testified.

Q. I am telling you what they have testified and ask you if you will take that into consideration?

A. I take it into consideration—or at least I do not consider it. I take the thing as I find it.

Q. If that is the condition of the plant, what is the necessity of establishing a fund for depreciation?

A. Now, we have got on a very different proposition.

Q. It is the same proposition from a different point of view?

A. No, sir, entirely different, if you will pardon me. No matter what has happened in the past or whether there may be appreciations in certain items which overcome depreciations, as conservative business men managing a large property of that kind or any property, we must acknowledge the self-evident proposition that the plant

will eventually have to give up its day of usefulness, and
2108 the best we can do under those circumstances is to consider the plant separately and collectively and make up our minds in how many years, all things considered, that investment will have to be renewed. Then as conservative business men we must set aside each year and say that a certain per cent. of the value of that property must be set aside, and called part of the yearly cost as accruing depreciation. Now then if I come along later and find that certain things have happened and my estimate is wrong, I correct my estimate. But I have done the very best I can with all the knowledge I had in advance, to say what will be done in the future. For depreciation as a question of estimate for the future and the question of depreciation for a plant as submitted are two entirely different propositions.

Q. As I take it, you do not take the lamp of experience to guide your steps in the future?

A. We do not?

Q. I say you do not?

A. I do not take the lamp of experience to guide my steps in the future?

Q. Yes.

A. I certainly do.

Q. Here is a plant that has been in operation for a great many years and which has been kept up by repairs, and is worth more to-day than when it was produced.

Mr. MATHEWSON: Is that your testimony, Senator?

The WITNESS: I was going to say, I don't know that you know.

Q. I have asked you, assuming that that was so, assuming that that plant has been in operation, and you say you don't care how long it had been operating, you looked at its condition to-day, and if it was worth more to-day you so valued it and that it was
2109 worth $300,000 more than the book value?

A. If you will permit me, I don't think I said how long it had been operating, I said I would take it as I found it. I did say I should not care how many good bargains had been struck in the purchase of the property and its cost. I should take into consideration every element as an engineer in valuing that piece of property as to what I thought it would do in the future.

Q. From your investigation, did you not ascertain that parts of this plant had been in operation for a great many years?

A. Yes, sir.

Q. You did not take that fact into consideration?

A. Certainly. I also took into consideration the fact, apart from the years, what is its present condition.

Q. Certainly.

A. And in my depreciation, if you will permit me, my estimates on the depreciation, as I have tried to explain, I think, on the direct-examination, do not depend simply upon the case of exhaustion of life but upon my general experience as to how long we can depend, all things considered, as to when certain plants will be displaced, outside of the question of their actual usefulness as a piece of sepa-

rate apparatus at the time, but how long they will have to go before they will be displaced as a working unit.

Q. Displaced for what purpose?

A. Everything.

Q. For what reason?

A. Obsoletism, moving, because the city takes your property, because the city cuts your streets off and cuts you off from access to your water, and all sorts of the ordinary contingencies of business life. Street mains would be very largely affected on account of having to put in large mains for small mains, and the like.

Q. The taking by the city of your property is not a very serious depreciation, is it?

A. It depends on the price the city pays you for it.

Q. From your experience, I suppose, the same as others,
2110 it is that the city generally pays a little more than it is worth?

A. No——

Mr. MATHEWSON: I object to it.

The WITNESS: I would like to answer it. I have had some experience.

Mr. MATHEWSON: All right, if you want to answer it I withdraw the objection.

The WITNESS: You have the evidence right here that property that has been taken is not paid for at all.

Q. The property taken is not paid for at all? Well, we will let it go at that.

Mr. BURR: The City of New York is still solvent?

The WITNESS: She may not be if she goes on.

Mr. MATHEWSON: You cannot prove it by the fact that they have paid their debts to us, either for plants or gas furnished.

Q. Do you anticipate that there will be any greater advances in the method of handling retorts in coal gas plants than there have been in the past, in the intermediate future?

A. Any greater?

Q. Yes.

A. I am not looking for any great advance in the gas making apparatus. I am looking for very great advances in the burning, in the appliances of gas, but not for any great advance in the gas making business, I am sorry to say.

Q. Therefore there will not be any very great requirement for supersession by reason of improvement?

A. My anticipation is not very great in that direction at present, no.

Q. Therefore we have not got to take that element into
2111 consideration to any great extent?

A. Not as much as in the past, no.

Q. Is not the plant at 14th Street about the most antiquated type there is in use?

A. In New York?

Q. In the United States.

A. Oh, no.

Q. Well, what type is there that is more antiquated than the direct fire retort?

A. Direct fire benches of threes.

Q. Where are there any of those in use to-day, direct fire benches of three?

A. I cannot say from memory, but until very recently there was a very great number of them in St. Louis. I imagine they are torn out by this time. They got very good results from them, too.

Q. Is this theory of the necessity of a reserve for depreciation something new to gas science?

A. Reserve for depreciation?

Q. Yes.

A. You are not referring to the so-called reserve, are you? You mean the amount that I set aside for depreciation? Because you know the term "reserve" I have used in another sense, but you are referring to the depreciation?

Q. The depreciation?

A. No, I imagine it is as old as commercial life.

Q. It was well known in 1884, wasn't it?

A. Yes, though differently treated. In the older days the prices were higher and the profits were larger and the amount of money was constantly carried back into the business for renewals and for extensions, and they did not attempt to capitalize all those extensions. In that way they were sometimes unconsciously, as I have discovered in my examinations, taking care very fully of depreciation. Now, as time goes along and the price is reduced and limitations are put on the price, we have to figure very much more closely and see how much we can put aside and how much we will be allowed to
2112 be put aside, specially as they do not allow us to capitalize anything in excess.

Q. The way the Consolidated Gas Company has been financed is to make the necessary repairs and extensions out of its earnings, is it not?

Mr. MATHEWSON: Repairs and extensions?

Mr. PAGE: Repairs and renewals.

A. Repairs and replacements so-called as current renewals; current renewals, as distinguished from deferred and final renewals.

Q. Now, we will also go to the further item of extensions. Have they not been taken care of in the same way?

A. Out of their profits?

Q. Yes.

Mr. MATHEWSON: Does Dr. Humphreys have any information on that subject?

Mr. PAGE: If he has not he may say so.

A. I am trying to think if I have the information. Just at the moment I would not like to reply to it.

Q. That is the way you advocate, is it not, of using any reserve that you have for depreciation?

A. I advocate taking the reserve for depreciation and putting it

back into the business, keeping very careful track of that reserve and how it is spent, so it cannot be considered as a warrant for extra capitalization. In other words, it is against the depreciation to the limits of my estimate.

Q. I may not understand your theory of depreciation, but your idea is that the fund should not be accumulated but should be carried into further extensions of plants?

A. My theory is this, Senator, that a certain amount of money should be set aside to care for depreciation accruing and which has not yet manifested itself by the breakdown of plants. Now the question is how shall we invest that money. If the business
2113 is lying dormant and is not extending and there is no use for further capital, then of course we will put it out to accumulate at compound interest and of course the day of the death of the business is coming. If we do not go ahead, we will go back very shortly. But if the business is active and there is use for capital to cover extension of business, I claim it is the wise policy to take that depreciation fund so far as it will go—you will probably require a good deal more, but so far as it will go—and use that depreciation fund not only for the current renewals and even the deferred renewals, but for the final renewals, to offset the final renewals and invest it in extensions so as not to draw in that extra capital which otherwise would be necessary for those extensions. In other words, if you put it into a sinking fund to accumulate at 4 per cent., all you get upon it is the 4 per cent., and that money is withdrawn from your business and it cannot be used except as the parts of the plant fall in. Now, I say if the business is active and you need that money and can make 4 per cent. or better on your extensions, and it would be very poor gas business if you could not—it is better to use that money instead of putting your money away at 4 per cent.

Q. I think I understand your theory. Now we will take that. At the end of forty years you have extended your plant to the value of the existing plant at the beginning of the forty years?

A. Yes—well, no, not quite. You will have taken care of your renewals as they come up and such surplus as you have will have gone into extensions. The Lord knows what that surplus would be, but you have to take care of your current renewals as they come up. You must bear in mind the plant does not exhaust itself in forty years. There is no such thing as the complete exhaustion of a plant at any one specified moment. The different parts of the
2114 plant are being exhausted from time to time, and the estimate I made up on the basis was that certain parts will go out in ten years, twenty years, thirty years or forty years. Now, if you are not ready to use the surplus from depreciation charges for exhausted part of the plant, at any particular moment, you have the opportunity to use it for extensions, and you put it into extensions. How much you will have in forty years, of course, is problematical.

Q. On those extensions you get an increased business?

A. Yes, and you need it.

Q. That goes on to your general earnings on gas sales?

A. Yes.

Q. Mingled with your other profits?

A. Yes.

Q. And at the end of that time, whenever that may be, that you say will arrive when you should need this plant to replace your original plant, your money has gone into extensions and the income derived from those extensions has gone into the ordinary income of the company, and if you have to replace your plant, would you not have to issue your new capital?

A. No, sir.

Q. Where are you going to get your money from to build your new plant, or old plant?

A. So far as you had used that money in advance for extensions, in lieu of depreciation, you would have to put out capital at that later day rather than at the earlier day. You would have saved yourself capital charges in the meantime. Now, the difference is this, you will in the meantime have earned on the money so reinvested in the business, and those additional earnings you need to pay the difference between what Mr. Bemis would calculate as the right amount for 40 years and the amount I would calculate. He would calculate only 1.05 per cent. and I would calculate 2.5 per cent. Now, those increased earnings would be the amount required at 4 per cent. to pay the difference between those two, and the
2115 burden so far as capital and all is concerned is exactly the same, provided I can make the 4 per cent. in my business. If I happen to earn a little better than 4 per cent., I have the advantage. In other words, it is less of a burden upon the business to put that depreciation cost back into the business than it is to put it out to somebody who will only give 4 per cent. For instance, if I have——

Q. But haven't you testified that in the meantime you have distributed your earnings on your extensions to the stockholders instead of preserving it to use in the rebuilding of the plant?

A. No, indeed, I have not. It has been absolutely held intact by the fact that I have put it back in the plant, which must be kept against depreciation, it does not go to the stockholders at all.

Q. I am speaking about the earnings.

A. The earnings are involved in that 2½ per cent. I could take and cover my depreciation by putting in a certain fund 1.05 per cent., if I placed it out of my own hands and did not retain it for use in my business between the 1.05% and 2½%. If I take all that money and reinvest it, the difference is covered by the earnings I get back at 4 per cent. from amounts taken out to cover depreciation and reinvested in plant, it does not go to the stockholders at all. For instance, if I set up a fund——

Q. But you are putting it into extensions, so at the end of this time you have a larger plant and you may have reproduced a plant that was the same value of your original plant, but you have nothing back to take care of your original plant which has given out?

A. We will take a simple case and say that there is no necessity for renewals in the meantime and that the plant ceases to exist at the end of 40 years and goes out of existence at once. In the mean-

time I have taken my 2½ per cent., which multiplied by 40 is 100, and at the end of 40 years I have reproduced that much more
2116 property, and my original plant goes out. I have got the 100 per cent. for the old 100 per cent. Now I have got to go out, instead of taking the old capital at the end of 40 years, I get my capital——

Q. It is just a difference of time when you would get the capital?

A. Yes, a difference of 40 years, an average, say of 20 years.

Q. And it is in the difference in the cost of gas of one per cent., isn't it?

A. No difference at all, it does not affect the cost of gas.

Q. It is more than that. You said you take two and one-half per cent., and putting out the same money at compound interest to produce the same result, it would take 1.5?

A. Exactly. And if I put 1.5 out I would lose the use of my money from the start and have to bring in capital to do the very same thing and pay the interest. The burden is the same on the business.

Q. But you are making the consumer to-day bear the burden of the needs of the future consumer?

A. No.

Q. That is if you capitalize your extensions to-day, you do not place the burden of those extensions upon the consumer of to-day, but under your theory you are making the consumer of to-day pay for the extensions of the plant and the capitalization at the end of 40 years, you make the consumer of to-day bear that burden and the consumers along during that 40 years bear the burden, don't you?

A. To a very slight extent in the first few years.

Mr. PAGE: I see that the Master does not agree. It seems to me——

The MASTER: I do not see why the consumer does not have to pay the money that goes into your sinking fund.

Mr. PAGE: He does, but it is 1.5 instead of 2.5.

2117 The MASTER: It is 1.05 to him to-day and the two and one-half is something to posterity that does not concern him.

Mr. PAGE: No, it comes out of his pocket to-day, it is a difference of 1.05 on the consumer of to-day.

The WITNESS: Oh, no, sir.

The MASTER: It does not seem that way to me.

The WITNESS: You have taken that additional amount and put it out, getting additional earnings, but you would have to bring in capital to do it, if you did not. If you take this money and put it out, you have to bring in more capital to do this work, the extensions will have to be made, whether you take it from one or the other. If you take it as new capital, and bring it in, the customers are going to have to pay for it. Nobody else will unless we have some more red journalism.

By Mr. MATHEWSON:

Q. You get revenue from the extension which you produce by taking the 2½ per cent. that if you did use it, would go towards

paying dividend, if you did pay dividends on original capital, wouldn't it?

A. Yes.

Q. And thereby it would come to the benefit of the consumer?

A. The burden of capital is exactly the same on the business, and on the company, provided always that it is both on a four per cent. basis that we figure. Of course there is an advantage to the company, and there it is good business to do it, because they probably earn more than 4 per cent. The first year they may not earn
2118 over two. I have put in many extensions where I didn't get 2 per cent. the first year, but it gets better as it goes on.

By Mr. PAGE:

Q. Why did you assume 40 years as the life of a gas plant?

A. Of a gas plant, I do not. I take each case as I find it.

Q. Well, you think a reserve should be made of 2½ per cent. on this gas plant?

A. Yes.

Q. On what do you base that?

A. On my general experience and very wide experience in such matters and after viewing the plant. And taking everything into consideration, so far as I can, I thought that is just as far a limit as I can go. Other minds materially differ with me on that. Professor Marx, for instance, thinks it should be 5 per cent., which makes it 20 years for final renewal. Professor Bemis thinks it should be 33 years, which is seven years shorter, but I prefer to be a little more conservative and I think I am safe in saying that forty years is all right, as it is the result of my experience.

Q. We have the plant of the Consolidated Gas Company which has been in operation, some portions of it, for 53 years, and Mr. Mayer has made a very careful examination and the greatest depreciation that he found in any part of that plant from an absolutely new plant to-day was 15 per cent. Does that affect your estimate at all?

Mr. MATHEWSON: Let me correct you, he found much more than that in some cases. In some cases as high as 25 per cent., and in one holder house he found 50 per cent.

Q. Well, we will eliminate the holder house, but we will take the machinery and the apparatus for gas making and the highest percentage of depreciation he found was 15 per cent., and from that to 5 per cent., and in some cases he found none. Now, in the
2119 light of that experience, what period of time are you going to place for the final depreciation of that plant?

A. I should not base my judgment upon Mr. Mayer's work any more than I base my opinions upon text books, if I think I know more about it than the text books, if I think I know more about it than the next books. Now Mr. Mayer has made certain statements, I don't know what they are or how he has figured it. I should want to go over the whole question with him and see whether he figured at it as I do before I express any opinion. I should say that my judgment of forty years is a very conservative estimate for ultimate

renewals, what I call final renewals of plants, and I think it would be so considered if you put fifty men here on the stand that had experience.

Q. If you put a cast-iron main down in the streets of New York it will last how long?

A. If you put a cast-iron main down in certain streets in New York and do not connect it up and do not regard it as a gas delivery main at all, so you will not have to consider whether it will have to be removed or not, and simply consider the question of the oxidization of iron, I am not prepared to say how long, but I should be almost willing to guarantee it for 100 years. All that I took into consideration in making my estimate.

Q. It has been testified that mains are in the streets of New York that were placed there seventy-five years ago, and were connected up and have been operated ever since and show no depreciation?

A. I don't know whether it has been testified or not.

Q. Well, Mr. Simpson so testified.

A. All right. I also happen to know that in New York the amount that I have set in advance without knowing anything about these facts for depreciation of the distribution system came out, I think, within .04 of 1 per cent. of what they have actually expended in keeping the mains up in the whole distribution
2120 system. In other words, they have been ahead of accruing depreciation.

Q. Well, then you would take 100 years as the life of the mains?

A. No, I do not. I say I would be willing almost to guarantee it for that. That entered into the matter so little it makes no difference.

Q. I understood you, Doctor, to say that was the figure you took in your calculation?

A. No, I did not.

Q. Excuse me, that was my mistake. Now we will take a gas holder.

A. A gas holder?

Q. Yes. What is the life of a gas holder?

A. The life of a gas holder altogether depends upon how it is built, the locality, the chances of its having to be replaced and chances of needing a larger holder and the like. I place no general life limit upon any piece of property, never have so testified and never will. Each case must be considered by itself.

Q. Well, take gas holders complete, built as they are in the City of New York and kept well painted on the outside. Is there any period of life we can place on the gas holders?

A. I would place different life on the different holders according to how they were constructed; there is a very wide difference in the gas holders of New York as to their method of construction, etc.

Q. But for depreciation, actual wear and tear, is it possible to set any limit?

A. Upon what?

Q. Upon the life of a gas holder.

A. Yes, the life of a gas holder in my experience has varied all the way from fifteen years up to—I have known them to go as high

as sixty years. I have had them give out inside of fifteen years. I have had to displace them inside of ten because the land was required for other parts of the plants. Making it necessary to absorb the cost of that holder for other reasons than the mere——

2121 Q. I am not talking about change of plant, and your wanting to remove your plant and wanting to tear down the holder for that purpose, but I am speaking now of the depreciation, the wear and tear which you have to take care of; what is the life of the gas holder upon which you base your calculation for that reserve?

A. That I could not answer at all generally, Senator. It would have to depend upon the case.

Q. I am confining myself to the holders of the Consolidated Gas Company.

A. They will vary in their life. I couldn't tell you what each holder was without having it all specified, and making a separate problem of it.

Q. In arriving at this figure of 40 years we would like to know what length of life you gave the holders?

A. I took a general survey of the whole field, and I set a life of 60 years on the distribution plant as a whole, and a life of 33 years on the works as a whole, and it happens to average up about 40 years. It would vary from year to year.

Q. When you have taken the holders and the mains of a gas plant you have taken the largest investment of capital, haven't you, that is here in the City of New York? That is, more than half of the capital employed is in mains and holders, isn't it?

A. In the works? I think not. My recollection is it is not. Of course you have a large amount of property in the distribution system outside of mains, services and meters, and the general property which we have roughly included in distribution all the way through.

Q. Did you take into consideration buildings, in making the 40 year term for depreciation?

A. Yes.

Q. And you calculate that the buildings will have to be replaced in 40 years?

A. Oh, no, that is not the basis of my estimate at all.

Q. Well, what life did you give to a building?

2122 A. That will vary according to each particular case as to the chances whether it will have to be displaced, extended, whether built with a design for the future, whether they have invested their capital for the future, or simply invested it for the present, and so on. It is not nearly as much a question of actual killing of the plant as it is of readjustment and the like.

Q. Well, an extension would be a replacement, wouldn't it?

A. Certainly not.

Q. Then whether they have got to extend their building for the future would have no bearing upon the depreciation value?

A. A very great bearing.

Q. In what way?

A. Suppose I laid out a plan for works, as I have seen many of them laid out, and have bought some of them, and it was built to sell, built perhaps to strike an established company. They might have spent as much money on that plant as would have put up a good plant. Poorly advised. Now, if they design that plant for the present uses, the undertaking continues and we have to go forward with the business, the depreciation on that plant will be very much greater, irrespective of whether they are good bricks or poor bricks, or good iron or poor iron, because not having been designed for the future they will have to be torn down and extensions made in that sense. Now, to a greater or lesser degree that enters into all questions of depreciation, because human brains are fallible. No man has the foresight to equal his backsight, and he cannot possibly in advance lay out that plant which will be best, all things considered, for the future. Mistakes must be made and capital sunk in that way.

Q. Well, supposing we take a plant which was in 1886 producing 19,500,000 cubic feet of gas daily, and in the same building they to-day produce 51,000,000 of gas daily. Would you
2123 consider that that plant provided for depreciation?

A. In that particular element that would be favorable; for the future it would be unfavorable, already crowded to its capacity.

Q. Then I understand that you would figure, if there was to be an extension of those works, that that extension would be figured as a depreciation of these buildings now, is that right?

A. Certainly not. If I had a building or a plant to extend and in any way I had to sacrifice parts that had already been capitalized, that part would be written up against depreciation, so far as the new plant went in to extend the capacity and had nothing to do with the parts displaced that would be a legitimate extension. So far as I had to sacrifice the old construction it would be a depreciation. I differentiate very particularly between the two.

Q. How much of the plant of the Consolidated have they sacrificed in this way in the past twenty years?

A. You ask me how much they have?

Q. Yes.

A. I don't know, sir. I have not been around here for twenty years examining every detail. I will say this, that from my knowledge of the way they keep their accounts, and my observation of these matters, they seem to follow a conservative, fair policy in that regard and try to make the adjustments fairly between the two elements. You cannot say any further than that.

Q. In your examination before the Gas Commission you stated you had known of some cases of an accruing depreciation being completely cared for by a conservative policy and charging liberally to repairs and to a like extent dealing lightly with construction accounts.

A. Do you ask me a question now?

Q. I ask you if you remember testifying to that?

A. Oh, yes, that is in accord with my views.

Q. Has that been the policy of the Consolidated Gas Com-
2124 pany?

A. No, it has not. My understanding of the policy, and

an examination of the accounts submitted to me indicates they have charged up their repairs, but they have not charged up in any such liberal way as against the replacements; in other words, putting in a new plant in addition to replacements as would cover the accruing depreciation. The case I had there in mind is more particularly the English case where they have an item they call "wear and tear." They interlock repairs and replacements together, as they can do if they wish. Preferably I should do so. I believe the two are interlocked. For instance, if a man does less repairs to his plant, he is going to have more renewals, and so on. Now the English companies spend a certain amount "wear and tear" and they treat this item liberally in their bookkeeping, and their amount spent for wear and tear is as a rule as much as I have included for actual repairs and depreciation in this case. So we find in the case of Massachusetts companies.

Q. In the case of the Consolidated Gas Company you have gas works that in 1884 were capable of producing 4,000,000,000 cubic feet annually, or about that, and twenty years later the engineers of these same works testify they are in perfect operating condition and repair. Would you deem it necessary to charge a depreciation item to operating accounts of works so increased in capacity as to enable them to deliver 10,000,000 cubic feet daily?

A. Certainly. It would not affect my opinion a particle. The question is what is going to happen now. The mere fact they have kept their works up is going to save them for all time to come from the renewal plant. I am just as efficient to-day, as I said to the Commissioners, and more so, than I was twenty-five years ago, to testify here; I have had a great deal of experience, but I am twenty-five years nearer my death. Somebody else will have to
2125 testify shortly for me, I hope.

Q. Would you consider then the condition of the Consolidated and its plants a matter more of good luck than good management?

A. Oh, no, sir; no, sir. It has been a very well managed concern. Mr. Bradley is one of the greatest gas engineers we have seen in America.

Q. And if they have been able for more than twenty years to keep this plant in perfect condition, so much so that an expert examining it to-day can find practically no depreciation from an absolutely new plant, wouldn't you consider that they had taken care of the current renewal and the current depreciation?

A. Yes, sir, current renewals and current depreciation but not final renewals; that is the whole story.

Q. And had postponed the day for final renewals very materially?

A. No, sir. I based my calculations upon the property being kept up.

Q. Mr. Addicks, he is a gas engineer of eminence, I believe?

A. Yes, sir, very great.

Q. He has sworn in this case, in an affidavit, that about four-fifths of the present generating capacity is in the shape of modern up-to-date water gas plants, which could not be improved upon anywhere, and the coal gas plants while composed of some apparatus which

is not of the latest pattern are as efficient and in shape to operate for an indefinite period without impairment of efficiency. Is that your judgment, too? Do you concur in that?

A. I concur to this extent, that a plant, so far as efficiency is concerned, if kept in repair, will last up to the time it has got to be renewed. The plant can be efficient and still have to be renewed. A boiler, for instance, works perhaps efficiently up to the day it is renewed, but the day comes when it must be renewed.

2126 Q. But you can by continually renewing parts of the machine, you can very largely extend its life?

A. Yes, sir, and that I take into consideration. That is all included in what I call partial and current renewal. There is where the money goes. They have spent a lot of it for that very purpose. The whole amount I have got in for repairs and renewals taking in depreciation and everything, I have only included 14.15 cents and they have spent for the last twenty years 10.60 cents. Now that figures out—I think—I am not much on memory, but I think I am right about that, I have only got there 3.55 cents for accruing depreciation for the future.

Q. If you were dealing with an entirely new plant, Doctor, you would take forty years as the life of that plant for the purpose of depreciation, would you? I mean for the purpose of establishing a fund for the depreciation?

A. I really don't know what I should take, Senator, until I had examined the plant, as I have said, and I never yet failed to lay great stress, especially in lecturing to my students on the commercial side of engineering, that each case must stand by itself. I would want to examine that plant and consider the local conditions, what the chances were, whether the man had designed this plant along the lines I thought would last and it would be largely a matter of judgment as to that. I would not give any general statement of that kind and should carefully warn anybody against it.

Q. Well, assume a modern, up-to-date, well-built coal gas plant, new to-day, and you were called in to give advice as to the necessities for reserve, would you calculate the reserve on the forty-year basis, as you have in this case?

A. As I have said, I should want to know a great deal more than simply about the plant. I should want to know the condi-

2127 tions generally, the business conditions and everything else.

Q. What do you mean by business conditions in reference to a depreciation fund for a plant?

A. Well, I have already given one example, a very important one; the plant even though it were well designed, well built, but was not designed to best meet the conditions of that locality, as to using the materials, best adapted to the supply of gas in the locality, and best adapted to meet what I should consider the requirements of that business ten years hence. My judgmnet would be very much affected as to what I should set aside for depreciation. The unfortunate part of it is that the term depreciation has been used so much. I try to get out of it myself and use the term renewals, final renewals. Depreciation seems to limit it strictly to what you have in mind.

Q. Well, assume instead of depreciation then the word- "final renewals" as you define *it?*

A. And then the same question?

Q. Yes.

A. I have already answered it. That that would depend on the conditions in that particular locality and whether the plant was adapted at that time, and whether I thought it was adapted as to the future, or whether circumstances would come along which would make it necessary to make a change in the methods of production.

Q. The purpose of establishing final renewals then, or whatever you call it——

A. That is, I think, the best term to use.

Q. A final renewal fund—is it for a fund which will replace a plant when it wears out?

A. Not entirely, no, sir. It is to maintain the asset of plant at par. Now, it may not be used for renewals at all. We have fulfilled our duty as managers if we have kept our plant asset at par and can do that by placing certain moneys as I have explained in
2128 extensions, and do not recapitalize them, but have that piece of extension take care of that piece of depreciation. Of course that is practically being done all over the world in every business.

Q. Cannot you put it back onto the plant itself in the way of renewals and replacements as different things do wear out?

A. Cannot you?

Q. Yes.

A. That is a question, sir, that I am extremely glad you asked, because if I could reply to that so it could be understood, it would meet the whole question; it is because the plant does not wear out in that way that we have to have this money set aside from year to year. We want to spread the expense from year to year. Now, to take an example. Suppose it is a 40 year life. You will have to use your imagination a good deal, I never knew of such a case, but I think it will stand, and that the plant had been built——

Q. My imagination is in pretty good working order now, Doctor.

A. Well, we will try to cultivate it still further before we are through. You had a plant built up in units of 1/40; each year there was a unit added and it went on to the 40th year. Now, after that the complete cycle would take in renewal of 1/40 each year; you would not need any renewals fund. Now, the nearer you come to that, the nearer the current expenses meet the total renewal requirements, and in this case they come within 3½ per cent. a year of doing it. There is the point.

Mr. PAGE: May I suspend my cross-examination now and let Mr. Burr proceed with his. I have a few more questions I desire to ask, but I do not feel well enough to continue at this stage.

The MASTER: Proceed, Mr. Burr.

Mr. MATHEWSON: No objection.

2129 Cross-examination by Mr. BURR:

Q. You reach a cost at the burner of 51.802 cents per thousand cubic feet, Doctor?

A. No, sir.

Q. At page 1945 of your testimony, it is stated, "Cost at the burner, exclusive of repairs, other renewals, depreciation and contingencies, including extra hazards 51.802."

A. Quite correct, sir. That is not the cost at the burner.

Q. Well, it is the cost at the burner exclusive of the things that are stated here?

A. Yes, but that is a very different proposition. In other words, I have already eliminated some of the cost for my own purposes, as carefully explained.

Q. You have assumed this 51.802 to be absolutely correct as deduced from Exhibit 94 and the accounts set forth in that exhibit?

A. Yes, and with some adjustments that I have made myself here.

Q. Have you carefully analyzed the accounts of Exhibit 94?

A. Not the books—I have not made an exhaustive audit of the books. I start in with the general assumption that it is correct and that it has been approved, not that particular year, but the other years have been approved by the Stevens Committee Audit. And there was so little variation between the two that I felt warranted in taking that after a rather exhaustive examination myself extending over some months of the different figures involved, but as to having audited the books in the complete sense I have not done it.

Q. Have you examined the vouchers for the items appearing on the exhibit 94?

A. No.

Q. You have as a matter of fact accepted the statements on Exhibit 94 as correct?

A. I have. I have readjusted some of them.

Q. Then, as a matter of fact, your testimony as an independent expert is wholly based upon statements made by officers and
2130 employees of the Consolidated Gas Company?

A. Not wholly, no, sir. It is based to the extent that I have drawn out. As I have not seen the records, I am assuming the record is the same as my sheet.

Mr. BURR: That is all I want to ask.

Mr. MATHEWSON: Mr. Carter is here, if Mr. Burr can proceed with any cross-examination that he has of him.

Mr. BURR: I have no questions to ask Mr. Carter now, but I would like to know if I can obtain this information: I asked Mr. Addicks some few days ago regarding the largest sales upon a given day and he was unable to give it. Now I want to ask if he will name the day in 1905 when there was the largest aggregate manufacture of gas by the Consolidated Gas Company, and state the total gas manufactured on that day by the company.

Mr. MATHEWSON: That can be done. Yes, we can do that.

Mr. BURR: Now can I also get, for the same day, the total gas manufactured by each of the companies with which the Consolidated Gas Company has agency agreement?

Mr. MATHEWSON: No, we cannot do that. We have no record of that sort.

Mr. BURR: Haven't you the means of procuring that?

Mr. MATHEWSON: Well, I do not think we could invoke the risk of subpœna.

Mr. BURR: Under your agency agreement you have the right to look at their books at any time.

Mr. MATHEWSON: I do not think we should be asked to do that. We stated the amount of gas that we procured from them, and how much more they make or sell it does not seem to us is pertinent. So I should not attempt to do that unless the Master directed it.

2131 & 2132

The MASTER: I shall not direct it. I think you will have to subpœna those books, Mr. Burr.

Mr. KIRBY: You have no other witness?

Mr. MATHEWSON: We have Mr. Carter here if you desire to cross-examine him.

Mr. KIRBY: I am under the impression that we shall not want to cross-examine him, but I do not want to take that burden on myself.

The MASTER: I understood Senator Page to say that he had something else to ask Mr. Carter.

Mr. MATHEWSON: I understood otherwise, but suppose the Master is right.

The MASTER: Yes, I think you had better be here in the morning.

Mr. CARTER: Very well, sir, I will be here.

At 5 o'clock P. M., adjourned to to-morrow, Thursday, September 13, 1906, at 11 o'clock A. M.

Last Exhibits:

Complainant's 237.
City's 44.
State's V.

2133 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, *September* 13, 1906.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Page, Mr. Burr, Mr. Kirby.

2134 ALEXANDER HUMPHREYS resumed.

Cross-examination (continued) by Mr. PAGE:

The WITNESS: I would like to make a correction in a statement of mine, on page 2090. It is the question asked as to what would be the difference in pressure due to change of altitude, and I understood the question the reverse, that it was for a thousand feet rise in 70. Of course I did not take the 70 into calculation at all, and it would not make any difference.

Q. Where is the question?

A. The question commenced on the other side. Now, if I understand it, you want to know what would be the change——

Q. Well, I changed it, making it ten feet to the thousand instead of ten feet to seven hundred?

A. Nor did I catch the fact that it was ten feet rise. I thought you wanted to know what would be the change due to an altitude of one thousand feet, and my calculation was based on that. Would you like to have it answered as to ten feet or to 70, that is 100 feet in a thousand?

Q. No, my question was as to a rise of ten feet for a thousand feet length of pipe.

A. Oh, it is changed to ten feet in a thousand?

Q. I did that, thinking it would be an easier computation.

Mr. KIRBY: It amounts to what was the difference in each ten feet assuming the straight length of pipe.

A. The length of pipe makes no difference in this calculation whatever. It would be for the specific gravity 65, for each ten feet, it would be .0517. That would be the change in pressure without any regard to any other changes introduced by flow or the
2135 like. So it would be a deduction or addition to pressure provided there was no flow from the point on to the point where the gauge was placed to take the pressure.

Q. While we are on this subject, you spoke of the difficulty of delivering gas because of the ups and downs, I think you used the phrase "knobs and hills."

A. Knobs and valleys, or hills and valleys. I was trying to explain the uneven stages in elevation without any regularity, any plains in it.

Q. On page 2094 the answer was, "That is not the worst of it, it is a question of hollows and knolls."

A. Well, that is better than my term. Much obliged to the stenographer; it is certainly more elegant.

Q. Now, Doctor, if you have gas running along here and it goes up a hill and then down again, isn't that in effect the same as having a pipe on the level?

A. No, sir.

The MASTER: Why not make a diagram of that, illustrating the level and the hill and the hollow and mark it A, B, C and D, and ask the questions and have the diagram marked in evidence and let it be reproduced in the minutes, and then it will be intelligible. Because it will not be intelligible two months from now, and it will not be intelligible to the court, while a diagram would make it clear to everybody.

(Diagram drawn by Senator Page was marked State's Exhibit W.)

Q. Referring to State's Exhibit W, in which we will assume that the line A-B is at sea level, that A-C-B represents a hill having its highest point 100 feet above sea level—and that the C is at the highest point 100 feet above sea level; assuming that the gas is not flowing and gas is turned on in the pipes will not the increase of
2136 pressure of the gas as it rises from A to C have an effect to push the gas down the hill to B and will arrive at B at the same pressure that it started from A?

A. I would not like to accept the term push, but while the pressure will vary constantly in passing over the hill under the condition you named, no flow will be the same at B at the same pressure.

Q. Assuming that the flow has been established, will not the resistance of the gas in passing from C to B equalize the increase in pressure from A to C and establish a substantial equilibrium of pressure from A to B?

A. No man could answer that without having an exact statement of the amount of pressure that would be taken off at each foot of pipe. There would be a general tendency from A to C for the increase of pressure due to change of altitude to compensate for the pressure lost through flow of gas. From C to B, on the other hand, the loss of pressure due to altitude change would be added to the loss of pressure due to flow.

Q. Assume that at B there is an opening to the atmosphere.

A. A full opening?

Q. A full opening, and that there is no gas drawn off between A and B, then how would it be?

A. The pressure at B would in that case not be changed in any

respect by the change in altitude, but as to what the exact pressure would be would depend upon the rate of flow.

Q. Take a point half way distant between A and C, which we will call X, and a point half way distant between C and B, which we will call Y, each of which is 75 feet above the sea level, would the pressure be the same at X and Y, the gas flowing through with an opening to the atmosphere at A and B?

A. No.

Q. Which would be the greater?

A. The only gas being taken off is here at B?

Q. Yes.

A. The pressure would be greater at X.

2137 Q. Why would it?

A. Because you have got to have the pressure up to this point X necessary to push that up. In other words, pressure will continue to be absorbed all the way to B, so far as flow is concerned, irrespective of altitude.

Q. And so pressure would continue to be absorbed if the pipe passed on a level between A and B?

A. Certainly.

Q. So that the same condition would obtain in regard to the absorption of pressure whether the pipe was on a level or——

A. Due to flow, exactly, given the same pipe.

Q. Then I will alter my question in this way. Would the pressure be the same at B as it would if a pipe was run on a direct line from A to B?

A. No.

Q. Would it be greater or less?

A. If run on a direct line it would be greater.

Q. Because there is a greater length of pipe going over the hill?

A. Yes.

Q. Now if we assume the same length of pipe then from A to B on the level, the pressure would be the same?

A. In other words, turn your plan over and let it be a turn on the level.

Q. Yes.

A. No.

Q. Would it be greater or less?

A. It would be less, because you have absorbed some in the curve, which is a partial bend.

Q. As I understand your answer, if this line A to B was flat on the ground on a curve——

A. (Interrupting.) That would be the same in either case if the altitude was the same.

Q. That is, if this curve instead of going up in the air was laid on the ground.

A. That is right; it would be the same, if you eliminate altitude, in either case.

2138 Q. The absorption of pressure by distance is the same whether the pipe goes over that hill or whether it goes on the level for the same distance?

A. For the same distance, except as the curves reduce it by going over the hill, we have to introduce bends of one kind or another, but I am perfectly willing to state my position——

Q. Therefore, with the gas passing through a curved pipe on the level, the pressure would be greater at X than it would at Y?

A. Yes.

Q. And would it be the same difference in pressure as it would be at X and Y and passing over the hill from A, C, B?

A. No.

Q. Why wouldn't it?

A. With the same difference in pressure?

Q. Would it be the same difference in pressure as it would be at X and Y and passing over the hill from A, C, B?

A. It would be with regard to the absorption due to the passage of the gas.

By Mr. MATHEWSON:

Q. But it would not be if you take into account the change of altitude?

A. No.

By Mr. PAGE:

Q. In passing over the hill you take into consideration the question of altitude?

A. And I say that, as far as the absorption going through the hill pipe is concerned, there won't be any difference, but of course there will be the difference due to the altitude in each case. In other words, the difference due to the altitude will be found in every point as indicated by that altitude; if you put on a gauge and have that condition, it is liable to occur at any moment, if there is no flow on that particular run.

Q. We are supposing that flow?

A. That I cannot answer you without having the data and the rates of flow and how much is taken off each line.

2139 Q. Assuming a constant flow and a free exhaust into the atmosphere?

A. Well, assume that, and then what?

Q. Well, wouldn't the pressure be the same, minus the absorption of pressure?

A. On a hill.

Q. At the points X and Y, or in other words would not the pressure be the same between A, X, and between Y B, X and Y each being at an altitude of 75 feet?

A. The previous questions as I understood them referred to a comparison between this curved pipe standing up vertical and laid on the flat. Is that what you are still asking?

Q. Yes.

A. There would not be the same pressure, of course, if it stood on the vertical as if it stood on the flat. At this point there would be the difference due to the altitude, whether it was flowing more or less.

Q. The flow though would change that difference?

A. It would not change that difference, the difference due to the altitude, in any respect. You would always find a difference there because here you gain and there you lose (indicating on Exhibit W.)

Q. You gave the valuation for the mains, that is, you agreed with the valuation given by Mr. Simpson?

A. Yes, sir.

Q. What calculations did you make to find out whether he was right or not?

A. I took City's Exhibit No. 1 for identification and went over each item in detail on a number of occasions with Mr. Simpson, going into original data as far as I could and going over every step of the calculations individually, making every calculation myself, and finally arrived at the conclusion that the estimate of $12,636,-150.04, as the present valuation on a replaced basis, was less than the actual replacement value.

Q. That is you took the figures and verified the multiplications and the results.

2140 A. I did that and a great deal more. I took all the data that he could supply me, cross-examined him carefully on every assumption, agreed with him where I could, disagreed with him in a number of cases where I thought he was too conservative, and arrived at the result, as I said, by saying that he is under the value, and positively I believe that that is the case. Mr. Simpson himself cannot replace those mains in New York under the present conditions for $12,636,150.04.

Q. How many miles of mains did you figure as laid under asphalt pavement?

A. I figured on 90 per cent. of the total mileage, just as Mr. Simpson took it.

By the MASTER:

Q. When you say that, do you mean under asphalt alone or under modern pavements of all kinds?

A. Modern pavements; asphalt, granite block on concrete, wood block on concrete and block asphalt on concrete; those four.

By Mr. PAGE:

Q. It costs a great deal more to lay an eight inch main than it does to lay a four inch main, doesn't it?

A. Eight and four, oh, yes, a good deal more.

Q. Now if a greater proportion of the larger mains were under the cheap pavements, your calculation would be out, wouldn't it?

A. Somewhat out, yes, sir.

Q. There was not presented to you, was there, the exact mileage and size of each main that was under each kind of pavement?

A. It was presented to me at so many miles of each size, with a general statement as to the percentage of these so-called new pavements in New York City. I called for verification and they

2141 gave me the records that they had collected as to details from the Bureau of Highways or whatever it is. In, however, checking off Mr. Simpson as to his percentage, I took very careful

count of the points you have named and assumed a figure for the pavement which I felt was entirely safe, even to cover that point.

Q. Did you go to the books of the Company to discover what it had cost them, or did you assume the costs?

A. I went to many of the records of the company, including Mr. Simpson's black book, and Mr. Simpson gave me free access to all the information he has, as far as I know. I put him on the witness stand.

Q. Did you take account of the books of the company for excavating, and did you take the actual cost of excavation that you found on the books, or did you assume the figures?

A. I took the figures submitted to me by Mr. Simpson as the result of their own experience, necessarily varying, and having to be more or less averaged, and checked them up by my own extensive experience, as to what it would cost for labor and so forth.

Q. What figure did you take as the cost of excavation?

A. I took as the figure for all labor and cartage per foot for one and one-half inch fifteen cents, and so on down. I will give you the figures if you like. I took the figures that appear on the exhibit referred to for that item.

Mr. MATHEWSON: State's Exhibit 1 for identification, to which counsel is referring, refers to the situation "if the current prices for pipe and lead" are used, that referring to the prices current in January, 1906, when this was made up, although it relates to the mileage of October 31st, 1905, which was the amount before the Gas Commission.

2142 Q. In your computation for labor and cartage you included the item of labor and excavating and laying and back filling and in handling the pipe?

A. I have.

Q. Did you include labor for repaving?

A. Everything for paving is handled in that other item.

Q. You valued the pipe differently?

A. The pipe itself, yes.

Q. Did you calculate a uniform price for labor and cartage in the case of the excavation in rock as you did on excavation in dirt?

A. Not exactly because we went over the figures on the average as to what it actually cost per foot, which would take into account those variations, of course. The facts would show for themselves in the average price as made up in the records.

Q. What percentage of the excavation throughout the City did you figure to be in rock?

A. I figured the same as Mr. Simpson—10 per cent.

Q. And you figured what it would cost to lay each pipe separately, entrenched by itself, and assumed an opening for the laying, an opening in the pavement, and the repavement, in the cost of these pipes?

A. Yes, sir; that is, each size of pipe; not each pipe, I didn't mean computed each individual job, but each size of pipes we considered separately, just as shown on this table.

Q. A great many of these mains were laid by the original com-

panies that afterward consolidated in the Consolidated Gas Company, weren't they?

A. I presume so.

Q. And that in some streets there were mains of your company?

A. No doubt of it.

Q. If you were relaying those mains to-day would you lay them separately, or would you lay one larger main, if the requirements of the delivery in that street required the diameter of the two mains?

A. Personally, I should lay two mains.

2143 Q. But you would lay them at the same time?

A. I would lay them at the same time.

Q. And there would be but one opening in the pavement?

A. No, two.

Q. You mean by that, you could lay one each side of the street?

A. Yes.

Q. Aren't there cases where mains were laid on each side of the street and duplicated by a different company?

A. I imagine there are.

Q. In such a case as that, would you lay four mains?

A. If I was starting with a new proposition.

Q. Well, if you were reproducing it as you are in imagination now?

A. Well, I am reproducing this particular plant just as it stands, just the sizes.

Q. You are not reproducing the distributing system. That would take care economically of the output of gas as it exists to-day.

A. I haven't studied that sufficiently to say just exactly how I would lay it out; that would be a problem by itself. I am taking this property as I find it, and valuing it as to what it would take to reproduce that property in the present conditions.

Q. That is, if originally three competing companies laid mains in the one street, you would produce to-day, I mean on your theory here, you would reproduce those identical three mains?

A. That's about it.

Q. Although each main might have been sufficient in itself to carry the delivery of gas to-day?

A. I have not gone exhaustively into that question as to whether one pipe would be sufficient or not, but I don't imagine it is so at all.

Q. You have not studied, in making your estimate of the cost of reproduction, the distributing system of the company; you have not studied present conditions except that they are to take the pipes as they are now in the ground, and figured what it would

2144 cost to put them there now?

A. That is practically what I have done. I have studied present conditions.

Q. To what extent?

A. To the extent of understanding how they are conducting the business, but not to go to work to make out an engineer's diagram as to what exactly in my opinion would best provide for the present demand and in the most economical way provide for the demand in the future.

Q. As to the mileage of mains of particular pipe, you took Mr. Simpson's statement, you did not go the maps to discover and check that up, did you?

A. No, sir, I did not.

Q. You did not go to the maps to discover where these particular mains were situated?

A. No.

Q. Nor how many of them were in particular streets?

A. No.

A colloquy now ensues between counsel which the stenographer is directed not to report.

Q. In arriving at your conclusion you included the 27 miles of mains that are not now in use by the company, did you not?

A. I included this whole mileage of 822 miles, nearly, I think it is.

Q. It is 822.2?

A. Yes, sir.

Q. You know that Mr. Simpson has testified that the active mains of the company are only 795 miles?

A. I do not remember the exact figure. I remember that he testified that there was some few feet less active than the total number of 822.

Q. 27 miles would not be some few feet; it would be some many feet, wouldn't it.

A. It is not a large percentage for New York.

Q. It helps out pretty well on the final estimate of cost, does it not?

A. Yes, money is invested in it.

Q. If you were reproducing this system to-day you would
2145 not reproduce pipes that were not necessary and not in use?

A. No, I might put in pipes that are not absolutely necessary at the time, and probably should if I had any sense at all.

Q. Then, such pipes as you would put in to take care of future business would be extensions beyond the mileage of mains, here, would it not?

A. That would depend upon a very careful survey of what there is here, and whether or not there is provision for the future, which I presume there is.

Q. If you were called upon to estimate upon the cost of producing to-day a distributing system to meet the needs of the City of New York, in the Borough of Manhattan, you would take into consideration all the conditions surrounding it and the most economical way of handling that distribution, would you not?

A. I certainly should, yes, sir.

Q. That was not the method which you used in arriving at your figures of the cost of reproduction here?

A. My method was to take the pipes as listed to me and calculate what it would cost to lay those pipes under present conditions.

Q. For the purpose of establishing a fund for depreciation, you set a value upon the plant that is to be reproduced, do you?

A. Yes.

Q. What value did you take in the case of the Consolidated Gas Company?

A. I took for the value of depreciable property $34,419,418.38.

Q. Did you separate that into different items, that is, as to manufacturing plants and buildings?

A. No, I took the manufacturing plant as a whole and the distribution plant as a whole.

Q. What figure did you place upon the manufacturing plant?

A. On the manufacturing plant in Manhattan, eliminating for this particular calculation the 18th Street plant, I took $14,329,591.17.

Q. And the distributing system?

A. The distributing system, including the general item to
2146 which I have referred before, $12,589,827.31. And for Astoria $7,500,000, depreciable property.

Q. Astoria, they have not finished building it yet.

A. I have to include it in an estimate of this kind, because this has to do with the future as well as the present. It is practically finished, and depreciation will commence the moment that things are paid for and delivered over. Of course this represents not nearly what will be the full value of the plant when completed. I am modifying my estimate somewhat on that line for the present estimate.

Q. In figuring your amount necessary to take out of the gas sales, you have figured that on the 13,300,000,000 cubic feet as delivered to-day?

A. Yes.

Q. While the plant, including Astoria, would deliver in the neighborhood of 15,000,000,000, would it not?

A. Yes, but I have not included the value of the plant when it is delivering 15,000,000,000. I made a modification on that account.

Q. What modification have you made?

A. I have taken the estimate of $13,134,519.65 and I have taken out the tunnel and the land, although, of course, they would not depreciate; but they have value as far as the plant is concerned, and you have got to consider that. I have taken out for part value of the holder, because it is not finished, and I have taken out the coal sheds, etc., to the amount of $1,500,000. In other words, I have deducted from the $13,134,519.65, on account of the things that are not involved in depreciation, on account of things that are not at present depreciable, reducing that amount then to $7,500,000. This in my opinion, will increase the depreciable property,—when the plant is completed, to about $9,300,000. There may be considerable more than that due to other items as they will be put in as specified in the supplemental estimate.

Q. You have made your computation on the idea that a
2147 forty-year term would represent the life of the plant?

A. Yes, as a whole, averaging everything up.

Q. If you should value this plant next year would you deduct one-fortieth?

A. Valuing the plant next year?

Q. Yes, one-fortieth of your valuation of this year?

A. It would depend on what I should see when I look the plant over.

Q. In twenty years would you assume that the plant had depreciated about one-half, and if you were called upon to value it at that time would you take that into consideration?

A. I should confirm my previous estimate by careful examination, and I should particularly look out to see whether they had put back into the plant, without charging to construction, amounts to compensate for depreciation.

Q. Assuming that they, having been advised as to your theory, had adopted it and followed it out in every particular, would you then, if called upon to value the plant, value it at one-half of the valuation?

A. If they had adopted my theory and I should be called upon to appraise it at the end of forty years, and my estimate was practically correct, the result would be to appraise it at exactly the same value.

Q. Exactly the same value as to-day?

A. Yes, sir.

Q. That is, you mean if the same amount of extensions had been made?

A. No, I am not referring to the extensions in general. I am simply referring to such additions as the Massachusetts law puts it, "Additions and enlargement as against depreciation." I think that is the way it is expressed. If I had found that they had carried out my theory—I say mine, it is the one I am using, it is not mine; it is the one that is used all over—if I found that they
2148 had carried that out, and had, in addition to the amount actually expended for actual renewals, so that the plant was brought back not only by repairs, but by renewals, out of this fund—if in addition to that they had extended and enlarged their plant by the use of this depreciation fund, and that was within the scope of my appraisal, if my theory is correct, the appraisal would be the same, providing the units of value would be the same twenty years hence.

Q. That is, assuming that they had expended in renewals one-half the value of the original fund, or whatever they call it here?

A. Yes.

Q. That is, that they had expended $17,000,000?

A. Always providing that nothing has entered in to disturb the calculation. As I say, I should go and look at the plant and examine it and value it according to the values then apparent.

Q. That is the purpose of accumulating this fund or using this fund, because there are elements which enter in to disturb your calculations?

A. Yes, and as far as human foresight can go, you do introduce those elements.

Q. As to the portion of the Consolidated Company's plant that was taken over in 1884, did you apply this theory of depreciation in your valuation?

A. Certainly not; that was an entirely different problem. I had

no means of knowing what they had spent or had not spent. I took the plant as I found it.

Q. And you found that it was more valuable to-day than it was 20 years ago?

A. Yes, sir, according to present prices.

Q. Therefore, not having been operated on your theory, the plant is worth more than if they had operated on that theory; is that it?

A. No, sir.

2149 Mr. MATHEWSON: The plant to-day is not the plant of 20 years ago, Senator.

Mr. PAGE: It is with the exception of $5,000,000 which you have spent on it.

Mr. MATHEWSON: It is not the same plant; it is changed radically.

Q. And if you were called upon to value this plant 20 years from now you would look at the plant itself and its appearance and value it on that, and not take into consideration this element of depreciation. Is that right?

A. I should not go much by its appearance. I should go much deeper than that.

Q. Yes, I assume that you would make a careful examination of its physical condition at the time?

A. Yes, sir; in other words, I would check up my estimate.

Q. You would not take into consideration that, although that plant was working efficiently, that, nevertheless, there was a time coming when it would disappear like the life of a man would disappear, that you to-day were doing better work and accomplishing better results than twenty years ago, but you were twenty years nearer the end of your life. You would not take into consideration that depreciable value.

A. I should take into consideration exactly what I take into consideration in this estimate, and everything else, the best estimate I could make at the time as to its life, and so forth, as to what its present value, all things considered, would be; in other words I should not be estimating in the same sense with the facts before me, and instead of foresight I would have backsight, or a mixture of both.

Q. Then it would be immaterial to you in that estimate or appraisal as to whether they had spent $30,000,000 or $17,000,000 or had not spent anything?

2150 A. Oh, no, I should take everything into consideration that I could get hold of.

Q. Yes, but if the plant was in perfect condition and was producing the results that it was designed to produce you would not care whether they had spent $10,000,000 or $50,000,000 on it.

A. I should want to make up my opinion as to how much longer they could continue to do that same thing. There must be a limit to the life of a plant by exhaustion of one kind or another.

Q. Then instead of using the theoretical limit of life as forty years you would try to arrive then at the actual limit as near as you could estimate it from its past experience and present condition.

A. And then have to become theoretical again as to the future,

just as I have in this case. I have theorized in this case that this present plant, all things considered, will have an average life of forty years.

Q. The 1.05 per hundred dollars invested at 4 per cent. compound interest in forty years would equal the value of this plant?

A. Yes.

Q. And that is a very general way, is it not, of handling a sinking fund for depreciation?

A. I think it is not at all general in the United States in my experience. The case I have just quoted, one of the few under legal restrictions, in Massachusetts they don't do that. On the contrary the law, and the new law at that, specially provides for its being expended for renewals, etc., and the municipalities objected to putting it out in any form of sinking fund, thinking it is better used in their own business.

Q. That only relates to the municipal operations?

A. Yes.

Q. Now you prefer to take instead of 1.05 on the business today, 2.5?

A. I do.

Q. Because $2.50 without interest in 40 years will equal $100?

A. Yes, sir. In other words you are spreading the load evenly. If the total loss is $100, the total loss is going to be spread
2151 over 40 years. Then you spread the load evenly by putting $2.50 on each year.

Q. Well, the load would be spread evenly by taking $1.05 each year, wouldn't it?

A. No, sir, it would not.

Q. Your idea is that this $2.50 invested in extensions will produce a greater return than $1.05 invested at 4 per cent. compound interest, is that right?

A. Not exactly. It is somewhat in the direction of my line of thought. My idea is that the $2.50 devoted to compensation for yearly depreciation, so much of it as is not used during the year currently for renewals, what I call current renewals, will be put into extensions of plant as an offset of the depreciation that has not yet developed, and so much of it as goes to those extensions, will win earnings.

Q. The ordinary repairs which were made, and which you have specified you would take out of this $2.50, you have already taken out in your computation, haven't you?

A. In my computation I take out the ordinary current repairs for that particular year as they would vary very widely from year to year and do not furnish a safe figure for average results, and I introduce in place of that the average current expenditures for repairs during the period of 20 years.

Q. That was an entirely different factor than is involved in the depreciation factor in which you have provided a fund to replace the plant 40 years hence, $2.50, is it not?

A. No, sir, it is not. It is quite in conformity. The whole thing is very consistent in my opinion.

Q. But as I understood you to say, that there is a necessity for

providing a fund which will take care of the invisible depreciation——

A. Yes.

Q. That will result in death at forty years from the birth?

A. That is right.

2152 Q. And that $2.50 on the $100.00 is the amount that is invested in the plant?

A. That is right, and that amount is fixed after considering the repairs. I consider the whole problem together. I know some companies I examined I should not put in anything for depreciation at all, because there is so much money being expended for repairs, current renewals and small extensions, and the like, which do not appear as expenses, but which really go into that account. They all go into the wear and tear account, and when I find that to be the case I even go to the point of cutting down.

Q. Now, you invested $2.50 instead of putting it in the bank, putting into the gas business in the way of extension?

A. Yes, sir; part of it.

Q. And you figure, I suppose, that that would bring a return of 10 per cent.?

A. No, I do not go as far as that. I figure it will give us at least 4 per cent., because we have to bear in mind that at first the investments of the gas companies do not bring in large returns; they have to be built up.

Q. But, Doctor, we are not taking a new gas company and starting it; we are taking a gas company that has been established for years.

A. I understand.

Q. And we are providing for that.

A. Yes.

Q. Let us get away from any new gas company idea.

A. I have not introduced the new gas company idea. I was considering this particular case, and had fully in mind what you had.

Q. Let us get down, eliminating the new gas company——

A. I would be very glad to eliminate it, as far as I am concerned, because I have never introduced it.

Q. And answer the questions.

A. I will answer them just as you ask them.

Q. You calculate that the Consolidated Gas Company

2153 would earn on those extensions 10 per cent.?

A. I do not at the start, no, sir.

Q. Why not at the start?

A. Suppose it is an extension of pipe; they have got to wait until they get the business and build the good will up. Now if it is renewal, that is another proposition; that is not new money, it is a renewal of the plant as it exists. If it is an extension of plant which is not fully demanded, but it is demanded partly for the increase of business and partly by wise management, for increase in the future, which must be provided for, it is not earning to any such extent as 10 per cent.

Q. Give us the amount it would earn on your theory?

A. I don't know. I should have to have each case by itself.

Q. But we have got a fund here that you built up, $2.50, and you say that it would earn so much more as one reason you want it put into the gas business instead of putting into the bank to-day a smaller sum which will earn 4 per cent. compound interest. I want to get at what that return will be which makes this a more advantageous theory of handling the money?

A. The only trouble is you have the wrong idea of what my theory is.

Q. I think not.

A. The money reinvested in the business will earn a certain amount, and I simply assume, and feel safe in assuming that, that it will, as a whole, average 4 per cent., and if it does average 4 per cent., then we are putting no greater load on the business than if we put it out at 4 per cent. and deprived ourselves of that as working capital and had to borrow other capital for that purpose.

Q. Well, assuming that it earns 4 per cent., how much would that 4 per cent. on the $2.50 amount to in forty years, the interest itself compounded?

2154 A. You would not have that interest. It is the additional interest that comes in from that $2.50 that enables you to pay the $2.50 as compared with the $1.05. For instance, suppose instead of figuring it that way, I say I will not pay in $2.50, but I will put into the business the same amount that will be required if I put it into a sinking fund.

Q. Well, what are you going to do with that 4 per cent. you earn—distribute it to the stockholders?

A. No, it is required to make up this very amount. Suppose I say I will put in $1.05 the first year, and I will go on putting in a like amount that I should have to pay or lose by way of interest earned in the sinking fund. I would then have to put in $1.05 the first year, the next year I would have to put in $1.09 to carry the interest——

Q. You are assuming that the money is not invested where it would compound itself, is that it, but——

A. I am assuming that it is compounding in the business, and having the earnings, I must take them out to furnish the $100 at the end of forty years, because forty times $1.05 does not make 100, but $42, and some one else supplies that $58. They don't do it for charity, the banks, for instance; they do it because we give them the use of our money.

Q. But there are some charitable individuals that are very glad to do that.

A. I have never met them.

Q. You don't know of any such banks?

A. I don't know of any banks that are willing to give you $58 for the use of $42.

Q. They are reinvesting the money each year and compounding it that way?

A. I am giving that——

Q. Let us eliminate the charity and get down to business.

A. If you are carrying a sinking fund on your own books and

prefer to do it this way rather than put up the $2.50 as an even load throughout the term, what you would have to do would be to pay $1.05 and a different amount each year according to the
2155 accumulated interest until the last year you would have to pay into your sinking fund to cover principal and interest 4.8742, the total coming out nearly right, $99.77689.

Q. That is assuming you had not invested your sinking fund at interest, but that you put away a sufficient amount of money each year to have taken care of the fund and interest compounded?

A. That is putting it right into your business, and you have the return from your business to help pay these amounts, of course, the same as in other cases. But you have an uneven distribution of the load instead of an even distribution.

Q. But this $2.50 you put in your business is going to earn something, isn't it?

A. Yes.

Q. Now at the end of the 40 years what becomes of those earnings?

A. They have been put back into the business and you have the increased earnings from the additional amount you put in instead of putting it out from your own hands and getting in more capital to do it. One compensates for the other.

Q. At the end of 40 years, having put in these earnings, and they in themselves having earned the 4 per cent., therefore you have been compounding your earnings or interest, whichever it is, and take out $2.50 each year and invest that and invest your earnings on that $2.50, and at the end of 40 years what sum would you have?

A. $2.50——

Q. $2.50 compounded at 4 per cent. would amount to how much?

A. I can figure it out in a minute.

Q. You have some tables with you, have you not?

A. Yes.

Q. I would like to have that down.

A. 4 per cent. for 40 years?

Q. Yes.

A. I cannot get that direct from any table I have got. I would have to calculate that out. I will give it to you. Are you
2156 going to examine me after the lunch hour? I can give it to you after lunch.

Q. I suppose Mr. Mathewson will.

Mr. MATHEWSON: Very briefly.

Q. Then you will be back after lunch, doctor, and can give it.

A. My tables do not give that direct.

Q. Now if at the end of 40 years we are going to buy this plant, you would take into consideration the original plant and extensions and capitalize that, would you not?

A. If I was going to buy the plant I should take into account all the property that was offered, tangible and intangible.

Q. And that would include the original plant and all these additions?

A. Yes, whatever was offered to me.

Q. Now, Doctor, in addition to accumulating this fund you want 5 cents on every thousand feet of gas sold besides, do you?

A. No, I do not want it.

Q. Well, you take it?

A. No, I do not take it as a permanent thing. I simply ask that it shall be reserved as a cushion, because if the price is to be fixed we cannot tell what contingencies are to be met. Even by an experience of twenty years something is liable to happen every day, and I have mentioned a great many of them, all of which I have experienced myself, every one of them; and therefore I say that the company should be allowed for a limited time to take such a reserve, say until they have built up one-tenth of their capital, and then to cease. It is a practice that is quite regularly followed on the other side, where they are very carefully controlled by Parliament.

Q. Well, that 5 cents on each thousand feet of gas as sold would amount to some six hundred and fifty thousand dollars a year, wouldn't it?

A. Yes, I think so; yes.

2157 Q. Of course, the sales of the Consolidated Gas Company increase each year, and have done in the past, and probably will in the future, is that right?

A. I cannot say much about the future. The last year they have increased very little. I think .85 of one per cent.—something like that. They will get an increase, of course—I won't say of course; I don't know—they will get an increase probably from an increase of population.

Q. Well, even eliminating that increase and taking that amount that you want reserved, or that you suggest should be reserved, at six hundred and fifty thousand dollars a year, how long would you take that out—how large a sum would you accumulate?

A. Until it accumulated, say, to one-tenth of the capital.

Q. That is, one-tenth of $80,000,000?

A. No, one-tenth of the capital involved in this particular branch of the business.

Q. That is, this $34,419,000?

A. No, that is the depreciable property; one-tenth of the capital actually and actively employed in the gas business.

Q. That includes land and everything else?

A. Yes.

Q. That would not include stock holdings, you mean, in other companies?

A. No; just as if the Consolidated Gas Company was a separate business standing on its own bottom.

Q. Well, for the purpose of this argument we will make a violent assumption, and assume that the land is worth $15,000,000. You would add that to it, would you?

A. Yes, for this purpose.

Q. Yes; I would not for any other, Doctor. Now, that would make $49,000,000 in round figures, or we will call it $50,000,000. Now, you would go on taking out this $650,000 until you had accumulated how large a fund?

2158 A. About $5,000,000, using it in the meantime for the purpose named, for a cushion; if you had an explosion or anything of that kind, you could fall back on that.

Q. What would you do with that money; if you got it this year, what would you do with it?

A. It would depend whether we had any reason to draw upon it. If not, let it out.

Q. Would you seek some charitable institution?

A. No, I should not expect to do much with a charitable institution.

Q. Would you put it in the bank and let it lie there without interest?

A. I would invest it the very best way I could, whether in the business or any other way.

Q. Well, the best way——

A. It would not be capitalized, and would not be given out as dividends.

Q. The best way you could discover to invest your $2.50 was to put it back into the gas business, it being one of the most productive things you could think of?

A. Yes.

Q. Would you put this back in the same way?

A. I don't know whether I would or not. There would be no objection to doing it in my mind.

Q. And if you did and there should come some of these untoward circumstances which you think might possibly happen, where would your money be to take care of them?

A. You would not have invested that in the business unless you needed that extra capital. You would simply have then deferred the bringing in of the extra capital. When the trouble occurred you would now get that capital which otherwise you would have obtained outside in the first instance.

Q. Then in eight years, Doctor, you would have taken out 2.5, which amounts to how much on $34,419,418.38?

A. Do you mean per year?

Q. Yes.

2159 Mr. MATHEWSON: I do not see where you get your eight years, if you take out your $650,000 a year and it accumulates. It would take a shorter period than eight years considerably, I should suppose, as that would be without accumulation, would it not?

The WITNESS: The amount you asked me for would be about $860,480.

Q. Take out $860,400 for that, and on your five cents you take out $365,000. That is, for this purpose you would take $1,225,400 each year?

A. For that purpose, no, sir.

Q. What?

A. No, sir.

Q. Each year up to the time you——

A. I think you are entirely losing sight of one very important element. Before putting in that amount I have deducted, if you

will refer to this, the actual expenditures, and as this is based on the full period, I, of course, deduct final renewals. Now in this particular case the final renewals are involved in that 10 cents, but that 10 cents not only involves things in the way of estimates, but things actually spent for in the way of renewals. Now those final renewals—this company has actually spent in 20 years three cents a thousand, so I do not put in the total of that on estimating, but I simply take out the amount which is actually spent and put back in place of it the amount I conceive to be large enough not only to cover the amounts actually expended, but also the amounts which have not been met yet, but are simply accruing liabilities.

Q. Then do we understand that this company has been taking care of final renewals currently?

A. To a certain extent.

Q. And to such an extent that the plant to-day is in as perfect condition as a new plant?

A. No, I do not say that.

2160 Q. I know, but another expert has.

A. It is in good working order, but its life is more or less exhausted. Another way of looking at it is that I include in my estimate for up-keep of the plant, including this amount you refer to, this $2.50, 14.15 cents, whereas the total amount expended for current renewals as found and repairs has been 10.60, which is slightly changed by the figures that have been involved since from the State Commission's amount of 10.89.

Q. As I understand your testimony in regard to this five cents, that is to provide for fluctuation of business, to provide for explosions if there should be any; it is to provide for accidents and injuries and things of that sort?

A. And electrolysis.

Q. And electrolysis?

A. Yes.

Q. Well, that would be depreciation. You are taking care of that pretty well in the depreciation.

A. Absolutely not a cent.

Q. Here is your distributing system, you are going to depreciate that in 40 years and we have mains lasting for 75 years which will possibly last longer?

A. And on that distributing system they have spent in the last 20 years the full amount which I allowed for depreciation.

Mr. MATHEWSON: The full amount you allowed for depreciation for the distributing system?

The WITNESS: Yes.

Q. They did that by putting out new mains?

A. I am referring to the mains not charged to new mains, but charged for replacements and the like, just exactly as I would do it.

Q. Then, do I understand you to say that in the distributing system they did expend this five million dollars, this five cents?

A. No.

2161 Q. You mean that in their mains——

A. Now you are talking about the reserves.

Q. Let us keep to one subject if we can.

A. Yes, I would like to.

Q. I was not talking about taking care of your mains out of this five cents until you said you were.

A. No, sir, you spoke of electrolysis and asked if I had included that in the depreciation for the mains, and I distinctly said I had not.

Q. Yes, I think that is correct. Then, to this speculative field of electrolysis about which we know nothing, whether it will depreciate or not?

A. I don't know whether you know about it or not, sir, but I do know. I know it is a very serious hazard in the business, very serious. Whereever there are stray currents we expect electrolysis more or less, and there are stray currents in the City of New York.

Q. To that extent my ignorance will correspond to your knowledge, doctor?

A. All right, sir.

The MASTER: Drop the persiflage and get down to business. What is the question?

Q. My question is that this five million dollars is to take care of explosions and unexpected accidents and fluctuations in business.

A. Fluctuations in prices of labor and all the things that make up a variation in cost, which variations we find all the time happening.

Q. And if a new company was starting in business it would be well for them to have reserve to meet those?

A. Yes, to accumulate to meet them.

Q. But you take now an old company that has been going for years and has had a surplus which it could draw upon to pay dividends when their earnings did not warrant it, would you also tax the public five cents per thousand cubic feet of gas to supply
2162 them with an additional reserve fund of $5,000,000?

A. I have not involved any question of surplus. I have simply taken——

Q. I know, but are not these very items that you speak of things that should be taken care of out of surplus if there is one?

A. No, I don't think so.

Q. That is, you think the people for eight years or less should go down in their pockets and pay $5,000,000 to this company in order that they may have a fund for such uncertain contingencies, and not call upon their surplus or stockholders by a reduction of their dividends?

A. That will depend, of course, upon whether they have been drawing full dividends right straight along, and it will also depend upon whether they are going to be allowed to maintain their own business, and whether an arbitrary price is to be fixed, and whether, therefore, an arbitrary price being fixed, they should not be allowed to have a cushion in between the actual present cost and the selling price in addition to return on capital.

Q. Then this five cents, as I understand it, is a defense against depreciation in the selling price of gas, or a decrease in the selling

price of gas and a cushion between the Legislature and the gas company?

A. In a measure, yes.

At this point a recess was taken until 2:15 P. M.

2163 After Recess.

ALEXANDER C. HUMPHREYS resumed the stand.

Cross-examination by Mr. PAGE continued:

Q. Doctor, you were to have made a computation as to what 2.50 per hundred dollars of depreciable value of the plant at 4 per cent. compound interest would amount to for forty years?

A. Yes, sir. That is $238.09.

Q. At the end of forty years by investing your 2.50 in the business and reinvesting the earnings at 4 per cent. in the business you would have at the end of the forty years 2.38 times the depreciable value of the plant.

A. No, sir. It is a different proposition entirely when you put it that way. If we took the 2.50 and placed it outside of the business in a sinking fund where we did not have the use of it, then it would amount to that money, but if they do as I said where I used the 2.5 we would simply have year by year not only the active current depreciation taken care of, the current renewals made, but we would have the final renewals paid for, currently, either by renewals or by plant investment to offset it. There would be no opportunity for accumulation in that sense.

By Mr. KIRBY:

Q. Doctor, in the table you have put in evidence, pages 1943 and thereon, you have put in as a depreciation factor a figure which is based on this 2.50 which you have figured in the way you have stated, have you not?

A. I have put in such an amount to be at once paid out for renewals or reinvested as an offset to the current undeter-
2164 mined depreciation. In other words, the accruing depreciation. In other words, I do not let it accrue.

Q. Whether you let it accrue or not it is for the purpose of taking care of that unseen depreciation which you said will so affect a plant like that of the Consolidated that in forty years an amount will have to be expended to keep it up to its present value.

A. Equal to its present value, no. Expended right there at that time.

Q. At what time?

A. Year by year, provided always that my premises are correct, that the business is an active one and such amounts as are not required for the current renewals can at once be actively put into plant as an offset to that accruing depreciation.

Q. And if this amount were not obtained from this fund you speak of, where would it be obtained from?

A. I don't know. I have never thought of such a contingency.

I have always worked on the principle that I must include in my cost not only the cost items which were made apparent by demands for payment, but accruing liabilities and that undoubtedly must be kept intact in that regard.

By Mr. MATHEWSON:

Q. Included in what cost, cost of gas?
A. Yes, sir cost of production.

By Mr. KIRBY:

Q. Do you know what course the Consolidated Gas Company has pursued prior to this time?
A. As far as I understand, to paying for their future renewals and not setting aside any definite sum until of late, when they set aside a sum of ten cents to cover that and many other items.
Q. And in current renewals did they include such renewals and all renewals which you consider are to be covered by your
2165 depreciation factor?
A. They covered as I understand all such renewals as became apparent to them at the time currently but they did not take care of accruing and undeveloped necessities.
Q. And your factor is to take care of such accruing and undeveloped necessities is it not?
A. Certainly.
Q. And that amount if not obtained from the consumer that is from the price paid for gas, would have to be obtained from new capital, would it not?
A. If you like to look at it so. I should say it would be obtained from the depreciation of the capital already invested. In other words, you would impair your capital to that extent but it would not be new capital.
Q. So no moneys would have to be expended? If it were merely an impairment of the present capital no new moneys would have to be furnished to meet these expenditures?
A. Certainly there would be. You have got to keep the plant up. First or last you have got to keep your investment unimpaired.
Q. And so if it were not obtained as I said before from moneys received from consumers in the price paid for the gas it would have to be obtained either from the reserve fund if the same existed or if the same did not exist from new capital invested in that business?
A. No, I should not put it that way. It would be obtained from new money brought into the business but it would not be from my standpoint new capital. I should not feel warranted in considering it new capital. I should simply consider it money obtained somehow to repair losses I had made.
Q. And not new capital being received it is not an extension of the present business?
A. Not an extension, no, sir.
2166 Q. Now, this fund which you would obtain in some way, whether from an addition to the cost, either from the consumer in the price he paid for gas or in a loan or in some manner

you desire or you state it is advisable to invest in the gas making business, do you not?

A. I work on the theory——

Q. Answer the question.

A. I will answer it just as I please. You cannot answer a question for me.

The MASTER: Repeat the question.

(Question repeated.)

Mr. PAGE: I ask that the question be answered yes or no. I think it is capable of such an answer.

A. No.

Q. According to your theory as set down in the statement to which I have referred, in what do you suggest or recommend that such moneys be invested?

A. To commence with, as I have tried to explain, you won't have the money to invest. As has been shown by my testimony you would only have a limited portion of it because I not only include in my 2½ per cent. the amount to cover accruing depreciation, but I also cover the amount which is actually expended from year to year; and I therefore state that in addition to the amounts which are so expended currently and have been expended currently for the past twenty years, the additional amount, part of the 2½ per cent. will be not invested for I do not consider that the correct term, but will be put into plant as an offset to the value of that accruing depreciation of the plant already established. The total investment will not have been changed.

Q. In other words, this 2.5 factor when used, is to be used not only to take care of this depreciation about which you have
2167 testified, but also to take care of current renewals; that is, to keep the plant in proper repair and condition, or do I misunderstand your testimony in that regard?

A. I am sure I don't know what you do. The 2½ per cent., according to the figures that I have prepared, have nothing to do with the repairs, as shown on that page of my statement, but it does include the amount expended in addition to repairs, for renewals and replacements as made. In other words, if they take the repair amount which I include and also this 2½ per cent. amount and add them together, it is my estimate of what the difference between that amount and the amount actually expended for repairs, current renewals—the difference between those two is what I estimate as necessary to put in for deferred renewals.

Q. Then do I understand you in saying that these current renewals, that is, the sum expended therefor, would be expended out of the depreciation fund, however, the same might be invested?

A. Certainly, sir. That is what it is for.

Q. And the proper amount to set aside for that purpose, whether they take place this year or next year or at any period in the life of the company will be sufficient if it is based upon a two and one-half per cent. basis?

A. Upon the basis of the figures that I obtained from the Consol-

idated books for repairs, if I add to that an amount which is indicated by the two and one-half per cent. on the depreciable property I shall have an amount which in my opinion will keep the property at par value from year to year.

Q. Then two and one-half per cent. in itself would not be sufficient?

A. Certainly not.

Q. What would be sufficient?

A. I have indicated it.

Q. Will you show where it is?

A. The total per cent. will be about 5.4 per cent., including
2168 not only current repairs, current renewals, but deferred; in other words, total maintenance.

Q. That is based upon the experience of the Consolidated Gas Company for the past twenty years, taking into account the current renewals as shown in one of their exhibits, referred to in your statement, appearing on pages 1943 and following, you consider them an addition to the amount they have spent yearly for repairs for the upkeep of their plant, that they should have set aside a sum reckoned at 5.4 per cent. on the amount invested in their gas business to take care of this depreciation factor about which you have testified?

A. Certainly not.

Q. Then what would the 5.4 take care of?

A. It would take care of what I understood you to ask me. If on the basis of my statement it required 2.5 per cent. to take care of renewals in addition to repairs, 5.4 is what it would require in per cent. to take care of the total up-keep.

Q. And what do you include in the total up-keep?

A. Repairs, current renewals and final renewals.

Q. And are those items the ones which your depreciation fund would be used for?

A. No, sir.

Q. Which of them would it not be used for?

A. It would be used for the total renewal, including the amount as shown in the books as having been spent for the last twenty years.

Q. Well, is that not what I have said in regard to the 5.4?

A. No, sir.

Q. Wherein is the difference?

A. I cannot follow your reasoning, Mr. Kirby. It is not it at all. If you are going to ask questions you can draw out anything you like from them.

Q. Well, you know what we are trying to get at?

A. I am sure I do not. Lord knows if I knew it I would tell you right off and save the trouble.

2169 Q. I think we can come to an understanding?

A. Personally, I doubt it.

Q. You desire to set aside a certain fund?

A. I don't desire to set aside a certain fund at all. Right there we do not understand each other.

Q. You recommend in this statement that a certain amount of

moneys be taken from the earnings of the company for the purpose of caring for depreciation, is that true?

A. Quite.

Q. You state on page 1949 as follows:

"My estimate therefore is not made up on the exhaustion of the plant by actual rust or by anything of that kind, but what I believe, all things considered, the life of the plant, when the plant will have to be renewed by reason of exhaustion of life. In this case I have taken what figures out to be almost exactly forty years, and I take 2½ per cent. therefrom as the right amount for forty years, and I take 2½ per cent. on the depreciable property, and having found the amount I divide it by the amount of sales and show a cost per thousand as we have in this statement."

A. Quite correct.

Q. Does it not follow from that statement that the 2½ per cent. which you recommend to be set aside is for the purpose of taking care of those things which you mentioned; that is, not exhaustion of the plant by actaul rust or anything of that kind, but by reason of the exhaustion of the plant, giving it a life as you estimate, 40 years?

A. In part you are correct.

Q. In what part am I in error? That is what I am trying to get at.

A. I am not offering any suggestion to set aside a fund—on the contrary, I have tried to maintain all along not to set it aside, but to put it back into the plant.

2170 Q. Well, we will assume that it is put back into the plant. My first inquiry is directed toward whether or not that 2½ per cent. item is a correct item to be used for this depreciation, to which I have just referred, and outside of such repairs due to rust and other things, which you may also have reference to?

A. No, sir; repairs due to rust, &c., if we can detect them, are included in the repair account, but not included in that 2½ per cent., for renewals which are made currently and all other things which tend to shorten the life of a plant or tend to terminate its life, rust and everything included; but rust we would probably detect from time to time, and that would be charged to repair account.

Q. It would not be paid out of that 2½ per cent. account?

A. No, not what we could detect; what we could detect we would repair.

Q. I think we understand each other on that score.

A. I do not know whether we do or not.

Q. I assume that we do.

A. I do not assume it. I have had very little indication that you understood it.

Q. I have a very good indication that you quite understand it.

A. Yes, I understand that perfectly.

Q. Now then, we go on: We take this 2½ per cent. and you desire that that shall be invested in a certain way, and recommend it be invested in the plant itself in some way, don't you?

A. For a specific answer I should object to the words invest or re-invest.

Q. Should be expended in the plant?

A. That is better, yes.

Q. And if I understand your testimony correctly, you have taken 2½ per cent. instead of 1.05, because while 1.05 is put aside in a fund bearing interest at 4 per cent. and the compound interest would bring the original back in 40 years——

A. (Interrupting.) If you waited that long.

2171 Q. Yes, if you waited that long; but this money, if expended in the plant, would bring back a larger and greater return; am I right in that?

A. Not necessarily, no, sir.

Q. Then why, if it will not bring back a larger and greater return, do you recommend its being expended in that way?

A. To keep the return up to par, keep the property investments to par from year to year; to maintain it, not to increase it.

Q. In other words, this 2½ per cent. is not to be expended in any part in the extensions of the plant?

A. Extension to the extent necessary to represent the depreciation of plant not yet determined by exhaustion.

Q. True; so that the first year the chances are that a certain part of this 2½ per cent. could be expended in extensions?

A. I have not the faintest notion whether it could or not; it would depend on circumstances, perhaps the very first year something would happen and you would have to spend it all in renewals. If you will take in the meaning of "Deferred Renewals" you will understand.

Q. Yes, deferred renewals. You may expend a large part of this depreciation fund; your stoking apparatus may become antiquated, and you may have to replace it with another apparatus and expend maybe more than you have set aside in your depreciation fund for this year, which might balance off the next or succeeding years, and which in 40 years would bring the amount which you state, according to your opinion, is a proper amount; but if we assume that that amount is not expended the first year, then what do you do with the balance, the difference?

A. I assume that the business, being an active one, there will be opportunities to put money into new plant, as an offset to depreciation, and having done so that depreciation is paid off right

2172 there and then, and all such amounts as are expended during 40 years, and all such property depreciation as so paid off, will at the end of 40 year- be taken as an offset to this accruing depreciation.

Q. So that if you were fortunate enough to be able each year to expend that money in new plants, and the next year the amount which you set aside was not sufficient, you would capitalize the amount you spent in new plants and raise the money to pay for this extraordinary expense?

A. No.

Q. Upon what then would you call for the funds to make this renewal?

A. Make a temporary financial arrangement.

Q. In other words, you would borrow money or take it from your reserve, if you had it?

A. Possibly.

Q. And this money which you have invested in new plant will bring a return which you state is somewhere more than 4 per cent. I am right, am I not?

A. In the long run, yes. I also stated that you would not do it in the first years.

Q. Even with the Consolidated Gas Company?

A. Yes.

Q. And it is invested in the making business, is it not?

A. Yes.

Q. And at no time have you counted upon a 4 per cent. return, have you?

A. No, sir.

Q. Then, if the company was fortunate enough to have been able to take care of its renewals by the expenditure of its current repair fund and had done so during this period of forty years, it would have two plants, would it not, each of the value of the original plant?

A. Of course, if you want to suppose such a case—I never heard of one—you would in a measure, have two plants, yes. You would have the old plant for what it was worth at the time, and you would have the new one.

Q. And the new plant from its inception would be bring-
2173 ing back such returns as a gas plant would be expected to bring in the community in which it was operating, maybe starting with less than two per cent. because new, and building up to four per cent. or thereabouts as it became older?

A. That is on the basis of your being able to make your renewals for some sum much less than it cost.

Q. No.

A. That is the way I understand the statement, that you are able to keep up the plant by simply expending a certain amount for daily renewals.

Q. That is it, whatever they cost?

A. No such condition could exist, in my opinion.

Q. I have assumed that it does exist, when I ask the question.

A. Well, I won't answer it, I think, because I give a good deal of thought to the questions as they are put to me and I do not give much thought to these hypothetical questions outside of my experience.

Q. You could certainly state what you consider a new gas company should earn on the capital invested in a gas making business, could you not?

A. Yes.

Q. What do you think that should be?

A. I think it ought to earn ten per cent. on the investment in the business, averaged up.

Q. And that on each addition to the investment and extension, finally, so that if we had a plant that started out with two and one-

half million dollars in the beginning that would earn ten per cent. its first year—or do you consider it should earn ten per cent. the first year?

A. No, I should not.

Q. What should you consider?

A. It would depend too much on circumstances. I do not like to generalize. I managed a company once that did not earn a cent for four years and had a handsome good will later on.

2174 Q. Take it over a period of 40 years, you think it ought to earn 10 per cent.?

A. Yes.

Q. And that 10 per cent. will be on the total investment that had gone into the plant during that period?

A. Yes.

Q. Figured from the time of the investment to the end of the 40 years?

A. Yes; not on the reinvestment covering depreciation.

Q. Not on the re-investment covering depreciation; that is my understanding. Now, this 5 per cent. reserved for contingencies; you are not prepared to state how you think that ought to be invested or used?

A. I do not think it makes much difference as long as we have the amount of reserve as a cushion.

Q. You would consider that if it were put into extensions of plant or a new unit added, that would be proper business management?

A. It would temporarily take the place of moneys that would otherwise have to be brought in.

Q. A new unit would be an extension of plant, would it not?

A. Not necessarily.

Q. You consider the Astoria plant is an extension of the Consolidated Gas Company, do you?

A. Yes.

Q. And you consider this 5 per cent. reserve might properly be invested in that plant, would you not?

A. Temporarily invested until needed, when they so defer the day for borrowing money for that.

Q. And when needed capital would have to be obtained from other sources to take its place?

A. That is right.

Q. And put into the Astoria plant in place of that which you take out, for the purposes reserved and set aside?

A. That is one way.

Q. And you expect this 5 per cent. invested in the Astoria plant would be earning as much return as is reasonably to be expected from a plant of that kind?

A. Yes.

2175 Q. And then, if a company had the good fortune to have created at the end of forty years a plant of the same size as that which it started with, out of this depreciation fund, paying for those renewals which would otherwise have to be taken out of de-

preciation, out of its current repair account, you would have a plant of twice the value of the original plant, would you not?

A. If you were able to take from what I call, for present purposes, my final renewal fund of 2½ per cent., and you were able to keep up the present plant, not only in full working order, but so as to take care of all exhaustion of life, and also build a plant of the same value, you would of course have a plant of double value.

Q. And that plant would have been paid for without any increase of capitalization of the company?

A. Yes, sir.

Recross-examination by Mr. BURR (continued):

Q. Doctor, is it customary in scientific and technical works where pressures of the atmosphere or gas are given, to give them at sea level, and at a temperature of 60 degrees Fahrenheit?

A. It is sometimes done in laboratory work; I have never heard of it being done in ordinary gas practice.

Q. Do not scientific experts, reading and using those figures invariably deduce from these standard figures the pressure of gases — higher or lower levels?

A. Certainly not.

Q. Or, to put it another way, when scientific data as to pressures of the atmosphere or of gases are given and no level is fixed or mentioned as compared with the sea level, is it not usual to accept those atmospheric gas pressures at the sea level?

A. In scientific work, where we are making comparisons
2176 with different localities, and it is scientific work, we do read it in that way, but in the gas business and in a certain locality we do not make such corrections.

Q. Why don't you accept that situation in the gas business?

A. Because we have one locality to deal with and we are not making comparisons with other localities. Apart from the cases I have stated that I have never heard of it being done, where we take the pressures as we see them, sometimes for the purposes of corrections of volumes and so on, we take in these different factors. But in our ordinary readings of pressure we take just what I have stated, the readings on the gauge, because those are the practical pressures that we have to deal with, and others we do not deal with. We do not have to.

Q. Not even where there are knolls and vales?

A. Certainly.

Q. Have you seen the report attached to the Investigating Committee of 1885?

A. 1885?

Q. Yes.

A. I cannot recollect whether I have or not.

Q. If you will look at this, which purports to be a report on the pressure of public lamps of the several gas companies, as reported in tenths of inches, as recorded by lamp pressure registers January 7th, 1881, and see whether they do not figure upon the difference between sea level and various elevations stated.

Mr. MATHEWSON: I object to this. The witness is asked to look at some document to see if somebody else did not figure on some basis.

Mr. BURR: He says it was never done by gas experts, in the gas business, and I want to show that it was done by the experts for the city as far back as 1881.

2177 A. I should not consider that as being in the gas business, any more than I should consider the Stevens Investigating Committee as in the gas business. I was talking about practical results.

Mr. KIRBY: It accomplishes results.

The WITNESS: It does not accomplish results, if you have a certain figure and then try to figure it out by taking another one.

Q. That purports to be a report of the Bureau of Gas and Lamps, January 7, 1881?

A. That is right. I am simply not willing to accept that as indicating practice in the gas business. It is simply the report of a bureau chief, or something of that kind. He may have had some reason for reporting in that shape; but what we have to deal with is the pressure that we find, irrespective of any calculations or deductions that we cannot make in practice, or under conditons that we have not to deal with.

Q. It was evidently intended to get the pressure at various points?

A. I am trying to see if it does. I will look at it for a moment and study it.

Q. Certainly; take all the time you want, Doctor.

A. Is there anything here that says it is pressure in tenths of inches after correcting for difference in level? I may be very stupid, and it may be that it is figured out so, but I do not see here any indications in the titles of the columns or anything of that kind that there were such corrections made. It may be, possibly.

Q. Does it not show the distances and the elevations from the level?

A. Yes.

Q. That these pressures are taken?

A. Yes, but it does not say that these pressures have been corrected for that; it does not say so. It may be so, I do not know. It may be that the pressures were reported as found. It is not a very conclusive report.

Q. On an inspection of that table which is attached to Dr.
2178 Mark's affidavit in this case, and which appears on page 45 of the affidavits submitted by the City of New York in opposition to the motion for injunction *pendente lite*, is there not such a statement?

A. Not the slightest, that is stated there.

Q. Assuming the specific gravity of 22 candle-power to be .65, would not a rise of 100 feet add a half inch approximately to the gas pressure?

A. Assuming the specific gravity to be .65 would not a rise of 100 feet add approximately five-tenths?

Q. A half inch, to the gas pressure?

A. Yes, my recollection is that it is .517, which is approximately half an inch, and would reduce the pressure for a like fall.

Q. In the matter of pressure, the variation is the main thing, is it not?

A. That is right.

Q. And the variation of the law which is now under discussion here is one inch, is it not?

A. The variation allowed is between one inch and two and one-half inches.

Q. Would not a law limiting gas pressure to one inch minimum and two and one-half inches maximum, if a half-inch pressure of water column were added to each of those pressures for each one hundred foot rise or *vice versa* practically be more easily fulfilled?

A. Yes.

Q. If this allowance of a half inch per hundred feet were made, would not any difficulties or variations of pressure arising be due entirely to the irregularity of consumers' demands, or to the size of mains used?

A. No, not entirely; there are other things that enter in. For instance, there are atmospheric disturbances which give us the same factors for difference.

Q. Well, *if* I do not say entirely; but I say mainly?

A. Yes, largely.

Q. If difficulties as to variations of pressure in any districts arose, would it be practically possible, allowing one-half of an inch
2179 rise per one hundred feet, or fall, to correct it by properly apportioning or distributing the mains to the demands of the customers?

A. We could take the demands of the customers for any one day and proportion the mains, so as to get a result of that kind; but demands vary from day to day and year to year, and demands for whole districts vary, so that the mains laid out for a certain district would be entirely upset as to design perhaps within a year or two. For instance, you might have mains designed for A to burn so many thousand feet in a given hour, and the same hour B should burn so many thousand feet, and so on, and might be within the law. Those conditions might change. A cigar factory might shut up, and others might be started in another district, and your conditions are changed at once, and the pipes that were designed to fill the conditions at one time would not fulfill them at another, without variation. That is absolutely so. Of course, the differences between winter and summer are also so widely divergent that you can not possibly cover that by any fine design, and the actual practical experience of gas engineers is not to attempt to do that, except in an approximate way, and then get down by actual experience and correct the troubles as they come up.

Q. Is it not one of the fundamental principles of gas engineering to keep down the pressure?

A. Yes, to a point where its consumers will get a sufficient supply for their appliances, the result being that of late years the demand is for a much higher pressure than when I first went into the business.

Q. What is the reason for that, in your judgment, for that change?

A. Well, you need hardly put it my judgment. It is simply the fact that since I have been in the gas business that the appliances brought in require higher pressure than they did in the older days,

2180 when they practically used argand and flat flame burners, and the superintendents of the works were nearly all hipped on the idea of keeping the pressure down to a minimum to reduce leakage, so that they would dissatisfy the consumer, and I frequently had to threaten my superintendents with discharge for the reason that they would not carry high enough pressure to supply the gas stoves and other appliances because they were either afraid there would be an excessive leakage and that I would blame them for that.

By Mr. MATHEWSON:

Q. Welsbachs also had something to do with it?

A. Welsbachs, as I have mentioned before, Welsbachs and stoves, require from one and one-half to two inches pressure, whereas in the old days we could get along if we could get inside the house with .7.

By Mr. BURR:

Q. But if the mains are sufficient for the maximum demand, will they not be equal to the lesser demand?

A. Yes, sir.

Q. Is it not true that in London the law requires that the gas pressure shall be tested at street lamp-posts and .1 inch water column shall be deducted for decreased pressure at service pipes?

A. The law demands that there shall be tests for pressure made, and they are penalized within certain limitations if they go below the minimum, but there is no limitation as to maximum pressure.

Q. Is it not true, as I have stated?

A. Will you state the law again?

Q. That the gas pressure shall be tested at street lamp-posts and .1 inch water column shall be deducted for decreased pressure at service pipes.

A. I don't remember having read that of late, but it sounds right.

Q. Mr. Bradley has testified that in some streets there

2181 are ten mains, and Mr. Simpson testifies also that three and four mains are frequently found in some streets. Is not this an exceedingly costly form of gas distribution?

Mr. MATHEWSON: He has not testified that that number of Consolidated Gas Company's mains were found in the same street. You are mixing them up with the other companies.

The WITNESS: I should say it was hardly possible from my information. I do not pretend to know all the mains, but I should hardly conceive it was possible. I have made a particular study of mains and I have watched the main distribution in New York more than the Consolidated Gas Company knows about, and have seen more than they think.

Q. Assuming that condition to exist, that would be an exceedingly costly form of gas distribution?

A. Certainly.

Q. If you were as an engineer requested to elaborate an adequate main distributing system with the least capital outlay, how would you go about it?

A. I should study the physical conditions of the city and I should then make a very careful study of the present distribution by areas and streets and then lay out my pipes and take care of that business, bearing in mind, of course, that those areas would be apt to change widely so I would have to lay out a wide margin throughout the general distribution system. Then I should be largely influenced by the conditions as to pavements, and even more perhaps—by the obstructions I should find in the street.

Q. That is in the bed of the street?

A. In the bed of the street. I should then lay out the mains decidedly with an eye to the future, because it would not pay
2182 me probably to rip up those streets again even if I could get my pipes in, so I should very carefully think of that, as the difference on that additional investment would not equal the expense of going into it later on.

Q. And that is all you would do with that proposition before you?

A. I should do every thing that a man could think of to influence my opinion as to the future distribution demands.

Q. Would you under the condition of least capital outlay put in two pipes or one pipe in each street?

A. If you will permit me, I prefer to answer that, that I should probably in New York City decide almost invariably to put in two pipes, because I should not only take into account capital outlay, but operating expense, which would involve, by the way, capital outlay also. I should want to avoid crossing the streets as far as possible and keep my mains on each side of the street. That is my present impression with regard to New York City.

Mr. PAGE: To avoid crossing the streets for services?

The WITNESS: Yes.

Mr. MATHEWSON: Especially if you had a subway down in the middle of the street?

The WITNESS: I had that in mind, yes.

Q. Mr. Simpson has testified that 795 miles of mains are active and 27 miles dead or not in use. Do you know the sizes and street locations of those 27 miles of dead mains?

A. No, sir.

Mr. MATHEWSON: He has not testified it was dead main. He said it was not in use.

2183 Q. Would not two pipes of a capacity equal to one large pipe cost more than one pipe?

A. Yes, sir.

By Mr. KIRBY:

Q. There is just one question I would like to ask. On page 1946 of the testimony it is stated final renewals, depreciation, pro-

duction, manufacturing, 4.9795. Distribution 1.5797, totaling 6.5592 cents.

A. Yes.

Q. What factors did you use in producing the figure for production of 4.9795 and distribution, 1.5797?

A. I used the factor given by the basis of 33 years life on works and 60 years on distribution, which, as I stated in my estimate, figure out practically 40 years for the whole plan.

Q. Did you use that 40 years for the production and distribution?

A. No.

Q. Did you use the 30 years——

A. I used the 33 years for production and 60 years for mains and distribution, and all that; in other words, the years that I took for the production being the same figure as Prof. Bemis uses for all.

Q. And what values did you use upon which you made that calculation?

A. That I gave you, you know, this morning. I will give it to you again, $21,829,591.17 for the production as they call it and $12,589,827.21 for distribution.

Q. The production including the $7,500,000 required at Astoria?

A. Yes.

Redirect examination by Mr. MATHEWSON:

Q. You stated in reply to Mr. Burr that two pipes which combined would carry the same volume of gas would be more expensive than one pipe. On the other hand, after two pipes were in,
2184 would not the expense of maintenance be less?

A. Certainly, that is what I would do it for.

Q. Your judgment would be that that would more than offset in New York City the advantage accruing from one large pipe.

A. Certainly, or I should not do it.

Q. Mr. Kirby has asked you a hypothetical question and asked if upon that basis you would not have a double plant in 40 years if his premises were carried out. Did you in your experience or practice ever know of such a case as he outlined in the hypothetical question?

A. No.

Q. Do you think that judging from your own experience and knowledge of the business that such a situation would be possible?

A. No.

Q. You said something in your cross-examination in reference to your not constructing gas plants in the United States. Have you ever constructed any here?

A. A great many—we are still supervising such construction.

Q. And installed water gas apparatus.

A. We do not in the United States, now instal water gas apparatus. We supervise the installation.

Q. Are you familiar with it?

A. Very.

Q. And also coal gas apparatus?

A. Yes.

Q. What in feet or atmosphere is this pressure of 1½ inches or variation of 1½ inches pressure?

A. Do you mean pounds to the square inch?

Q. Yes.

A. 54/1000 of a pound to the square inch about.

Q. You said that in London there was no limitation as to maximum pressure, only a limitation as to minimum?

A. Yes, sir.

Q. Do you know of any place where there is a limitation as to minimum?

A. I do not, except this.

Q. And "this" means New York City?

2185 A. New York City. Let me see, does not the law extend to more than New York City.

Q. No.

A. Manhattan, yes, New York City.

Q. When you gave the formula with the long radical sign at the outset of your cross-examination, did that relate to a single pipe straight of the length which you gave?

A. Yes.

Q. With no services off?

A. Yes.

Q. When you discussed the question of trunk mains in the street and the establishment of distribution areas or districts, did you take into consideration the question of whether it was possible to lay trunk mains in the streets of the city of New York by reason of the present sub-surface structures?

A. I certainly took into consideration the whole question, but I was not asked that.

Q. If it be true that in many streets of New York or some of them it would be impossible to lay more mains or larger mains, that would be an answer at once, would it not, so far as that goes?

A. Yes, certainly.

Q. If a system of trunk mains such as was suggested to you was to be installed, or an effort made to install them, would that be a matter of considerable time and considerable expenditure or not?

A. Trunk mains or separate district mains?

Q. Such as Senator Page asked you in reference to when he was discussing running trunk mains through the streets?

Senator PAGE: I did not ask him anything about trunk mains.

Mr. MATHEWSON: Oh, yes.

A. He referred to district mains, I believe.

Q. Well, such mains as he referred to as you understood it.

A. Of course it would take time and very large expenditure in view of the present conditions of the streets of New York.

2186 Q. And after these districts had been established, considering the change in consumption, would it in your judgment, even then be possible within each district to provide that the pressure will never be more than two and one-half inches and less than one inch and still deliver the gas to your consumers in proportion for use?

A. It would not.

Q. And if the mains were to be cut off in districts, so each district would stand by itself, would that not eliminate on the other hand the running in of gas from various other sections, which tends to unify the pressure in them?

A. It could neutralize that element. Each separate system would have to stand upon its own feet.

Q. In reference to mains and services, did you hear Mr. Simpson's testimony since your direct testimony, that the book figures of $1,212,071.09 for services and $7,852,151.03 being the book value for *mains* was a low valuation based upon his estimate of the original cost of installation even?

A. Yes, I recall something of that kind.

Q. Did you consider that subject?

A. I did.

Q. And what was your conclusion?

A. My conclusion is that it is a low estimate for the value, under those conditions.

Q. Eliminating the present book value?

A. Eliminating absolutely.

Mr. PAGE: I should not say that that was an estimate. It is a fact.

Q. In reference to the cost of replacements of mains, you have testified you think the figure of $12,600,000 and odd is less than it would cost to replace. What in your judgment would be the cost of replacing the 795 miles of active mains, excluding the 25 miles of mains which are not abandoned but not at the moment in use?

A. I believe it would cost fully that sum under present conditions.

2187 Q. The entire $12,600,000 and odd?

A. Yes, sir, fully that.

Q. Would you consider it good judgment to supplant the benches of sixes with nines in the company's gas plants?

A. Not under present conditions. I should want them to wear out more than they had at present.

Q. Will you take your statement of the cost of gas aggregating 70.947 cents and say whether the 14.145 cents is the 2½ per cent. allowance regarding which you have been testifying?

A. Whether that is it?

Q. Yes.

A. No.

Q. Is the 14.145 cents included in the 2½ per cent.?

A. Yes, certainly.

Q. Now, how much of the 14.145 cents did you say was actually expended in renewals and repairs during the past 20 years on the average?

A. 10.6 cents.

Q. That would leave how much of that 14.145 cents?

A. 3.545 cents.

Q. Will you deduct that from the 65.947 cents which you state to be "Cost at burner with no reserve as yet included to cover contingencies" and say what the remainder would be?

A. 62.042.

Q. That would represent the actual expenditures then?

A. Yes, sir.

Q. Now, Mr. Addicks testified in reference to the additional requirements for enrichment due to the change in candle-power and to a sum to equalize the labor for this year with the preceding average was as follows:

Enrichment	1.83 cents
Labor	.78 cents

The sum of those I make to be 2.61 cents. Now, do I understand that you include in the five cents under the heading "Re-
2188 serve as explained in Note" such items as the difference in the cost of material by reason of the change of candle-power?

A. Certainly, that is what the reserve is for.

Q. Now, will you add that amount of 2.61 cents to the last figure 62.402 cents which you said was the actual expenditures?

A. 65.012.

Q. Then assuming these two items of Mr. Addicks to be correct, that would make 65.012 actual expenditures quite aside from any reserve whatever, would it not?

A. Yes, averaging the repairs.

Q. And the difference between that and your total of 70.947 or between five and six cents would be left for final renewals and contingencies and other items which you have testified to?

A. Yes.

Q. Now when you speak of depreciation or final renewals, am I right in understanding that you do not mean wearing out of the plant so much as necessity of plant or supersession, as you call it, readjustment which may require the disposition of part of the plant before it is worn out?

A. I take all those into account.

Q. The extinction of life, as you call it, does not mean the wearing out of the apparatus?

A. No, I may not wear out, but may get run over by a trolley to-day.

Q. May I ask whether your estimates in this regard are based upon your own experience as well as upon your study?

A. They are.

Q. You have said that you require pressure to operate Welsbachs and stoves of 1½ to 2 inches inside the house. Is there any loss of pressure between the mains and house pipes or these apparatus?

A. Certainly.

Q. To what extent?

A. There is the pressure required to pass the gas through the meter. The meter itself is a machine that is operated by the pressure of the gas, and naturally absorbs pressure and ab-
2189 sorbs from .2 to .5. You cannot reckon on less than .5, when you are running the house to capacity. Then in your pipes in the house, supposing we have ideal conditions, we will have all pipes laid out according to schedule, which starts with the hypothesis

that there will be a loss of pressure of .1 of an inch for each 50 feet of run. Then you will have your bends included, of course, in that case.

Q. You were asked in reference to booster systems, or mentioned them in your cross-examination. What is a booster system?

A. It is a term I rather imagine borrowed from our electric light friends. It is a pipe run under a higher pressure than ordinary distributing pressures, and not connected or should not be connected, although they are connected sometimes, to the consumers, with the idea of carrying the pressure from the distributing point to some outlying point, and there to boost the pressure at that particular point where it is attached to the distributing main. It is a reinforcement of pressure by independent system of pipes.

Q. That was the subject on which Senator Page examined you?

A. He did examine me a little, sir.

Q. Are you familiar with any booster system such as those in Milwaukee and St. Louis so as to know how they operate?

A. I am fairly familiar with both of those.

Q. What is the result there, if you know?

A. They are helping the condition of affairs and reducing the variation of pressure, and St. Louis, for instance, is laid out with the idea that they will ultimately be able to keep within 3.2 inch maximum pressure, that is, they hope they will be able to do it.

2190 Q. Are they accomplishing keeping within the limits of 1½ inches pressure, if you know?

A. Do you mean 1½ inches variation?

Q. Yes.

A. I think not. They are certainly not keeping within the limits of two and one-half maximum pressure.

Q. When you testified in reference to your estimate of the value of the mains of the company, either upon original cost of installation or cost of reproduction, were you using the knowledge of Mr. Simpson or were you using your own knowledge and experience?

A. I used both to the best of my ability.

Q. But where you found that your estimates did not agree with his, whose did you accept?

A. I used my own.

Q. So that to all intents and purposes it is fair to say that it was your own estimate?

A. Certainly.

Q. Taking the mileage of mains as given?

A. Taking the mileage of mains as given. That is my basis for saying that I think the estimate is too low.

Q. Have you made any investigation or have you any information that the system of distribution of the Consolidated Gas Company is not economical?

A. I have not.

Q. Considering the situation in New York to-day, Doctor, with your knowledge of it, and assuming that you were to lay out a system of distribution to best meet requirements as was suggested on your cross-examination, is it your belief that it could be installed to-

day for less than the sum which Mr. Simpson has testified as the reproduction value of the mains in New York?

A. With $12,000,000?

Q. Yes.

A. I have never made, as I testified, a complete engineering investigation of that large problem, but from my present knowledge I have not the slighest doubt that to install such a plant under
2191 the conditions as they exist to-day would cost very considerably more than twelve millions of dollars. I have not the slighest doubt of it.

Q. Do you know whether in making that estimate, there was taken into consideration the extraordinary street obstructions, such as the subway and the electrical conduits for the trolley roads along the centers of the avenues?

A. No, sir. And that was one of the faults I found with the estimates.

Q. Those things would have to be taken into consideration if you were installing a system to-day, would they not?

A. Yes, certainly.

Mr. MATHEWSON: That is all.

By Mr. PAGE:

Q. You say there is a certain pressure at the meter which is less than the pressure in the main—I mean past the meter?

A. Yes, there is an absorption of pressure in the meter, that is right.

Q. A further absorption of pressure of .1 of an inch for each 50 feet of pipe?

A. Well, there probably is a good deal more than that, but I state, to be conservative, that the ideal condition in the house which would follow the laying of the pipes in the house according to these rules would show .1 inch if we used the gas according to which that schedule is laid out. In other words the schedule is based upon the falling off in pressure of .1 for each fifty feet. Of course it does not always fall so, because they do not use enough gas to reduce it .1, but we have to be prepared for it.

Q. Would not the same element of increase of pressure by increase of elevation also follow in the house pipe as it would in the street pipes?

A. Yes.

2192 Q. And your meter is as a rule in the cellar?

A. Yes.

Q. So that as you go on up in the house you have gained in the same proportion as you have given here for gain or elevation?

A. Yes. I considered more especially the first level of a house, which we have to think of. We have to think of the worst conditions as well as the good ones.

By Mr. BURR:

Q. What advantage outside of short services would be gained by a double line of pipe or mains?

A. The mere shortness of the service would not be much of an item. It is avoiding having to cross the street with the very expensive work you would have by reason of ripping up pavements, running under conduits and the rest of it, obstructions in the street.

By Mr. MATHEWSON:

Q. Senator Page has referred to the use of governors and district governors for the control of pressure in the distributing system. Would it in your judgment be possible for the rate of flow through the governor and the pressure at the outlet of the governor to remain constant and still have the pressure along the line of pipe covered by that connection to vary?

A. Yes.

Q. Would it be possible to have such variations under the conditions named as to be at a given point sometimes within the law and sometimes outside of it?

A. Yes.

Q. And not indicated by the governor at all?

A. Yes.

2193 WILLIAM HALPIN, called as a witness on behalf of the complainant, being duly sworn, testified as follows:

Direct-examination by Mr. GARVER:

Q. You are a member of the State Board of Tax Commissioners of this State?

A. I am.

Q. Are you Chairman of that Board?

A. Since the first of January, this year.

Q. How long have you been a member of that Board?

A. Since early in March, 1904.

Q. As a member of that Board did you take part in the valuation of the special franchises of the Consolidated Gas Company for the year 1906?

A. I did.

Q. Do you recollect that those franchises were valued at some $31,900,000?

A. That is the figure.

Q. In your opinion was that a fair and reasonable value for the franchises?

A. It was.

Q. The State Board assesses the special franchises of Public Service Corporations throughout the State?

A. All those occupying the public streets and highways for a greater distance than 250 feet in those streets and highways.

Q. Will you mention the different companies whose franchises are thus assessed by the State Board?

A. Railroad companies, steam and street.

Q. Railroad companies—does that include steam and trolleys?

A. Yes; telephone and telegraph companies, gas companies, electrical subway companies, water companies and oil pipe lines; and

we assess a number of scales in the streets used by private people. That comprises about all the assessments that we make.

Q. Did you mention water companies?

A. Water companies.

Q. Have you taken part in the assessment of special fran-
2194 chises of those various companies throughout the State since you have been a member of the Board?

A. Since I have been a member of the Board, yes.

Q. In making the assessment of the special franchises of the Consolidated Gas Company for the year 1906 did the Board consider the report of the company, a copy of which is now shown, marked State's Exhibit C?

Mr. BURR: Objected to as incompetent, irrelevant and immaterial.

The MASTER: He may answer it.

Exception taken by Mr. Burr.

A. The Board considers all the reports submitted to it when it determines the assessments, tentatively and finally, and it considered the reports made by the Consolidated Gas Company when it made the tentative valuation and when it made the final valuation of that company, this year.

Q. In this report, State's Exhibit C, the present value of the property in the streets, allowing for depreciation, is given. Do you remember whether the Board accepted that statement of value or whether it fixed an independent value upon the tangible property?

A. My recollection is that the members of the Board have considered that the present value of the tangible property of the Consolidated Gas Company and its constituent companies has always been under valued, and we have increased the valuation of the tangible property, and that is reflected in the assessment.

Q. Do you recall approximately the extnet of that increase?

A. No, I do not recall the extent of that increase, but I should say it was not more than from 40 to 50 per cent., but how close to that I do not remember. We have seven or eight thousand of
2195 those assessments to make, so that it is hardly possible to recall the items of any special assessment.

Q. Is it your recollection that this valuation was not increased by the Board more than about 50 per cent.?

A. No, I do not think it was increased more than 50 per cent.

Q. It appears that the final notice of assessment sent out by the Board of the franchises of the Consolidated Gas Company for the year 1906 was dated March 28th. Was that about the date when the assessment was finally fixed by the Board?

A. I do not recall the date when it was finally fixed. I know that the proper legal notice was given to the companies of the time of the hearing, and I know that the day before those assessments were certified to the Tax Department in this city, the chief clerk in the office brought the list of them to my house and I compared them with the figures I had taken at the meeting of the Board when the assessments were finally made, and compared the certificate as filed

with the assessments on the list I had. That was the day before the first of April, or perhaps the 31st of March.

Q. It is in evidence that the first notice sent out was dated some time the first week in March. Would the special assessment have been fixed between those dates, the date of the first notice and the date of final notice?

A. The assessments were finally fixed after the hearing, after Mr. Frank H. Platt was heard with respect to the assessments of the Consolidated Gas Company and its constituent companies, and not until after that.

Q. And that was in March?

A. That was in March.

Q. And Mr. Frank H. Pratt appeared as counsel for the company in objecting to the valuation that had been tentatively placed on the franchises?

A. Yes. Our method is to send notice to the companies
2196 assessed, the notice stating a time for the hearing when they may be heard if they desire to object to the assessment, and after the time of the hearing then the assessments are finally made.

Cross-examination by Mr. PAGE:

Q. The report, State's Exhibit C, is the report of the Consolidated Gas Company for the year ending June 30, 1905, is it not?

A. That is right.

Q. And in making your assessment you made it upon that report, largely?

A. Yes.

Q. As of what date?

A. As of the second Monday in January, 1906, when all taxes are determined.

Q. The Consolidated Gas Company is complaining in the courts of the valuation which you have fixed, $31,900,000, is it not?

A. I do not recall whether *certiorari* proceedings have been begun with regard to this assessment or not, but it would not surprise me if they had done so.

Q. They have as to all previous assessments?

A. They have as to all previous assessments, yes.

Mr. PAGE: That is all.

Mr. BURR: No questions.

ROBERT A. CARTER, recalled for further examination, testified as follows:

The MASTER: I believe you had some further cross-examination, Senator.

Mr. PAGE: No, I had no further cross-examination, but Mr. Carter was to produce an exact statement of the amount of moneys that were drawn from surplus accounts to pay the dividends of 5½ per cent. in 1899 and six per cent. in 1900.

2197 By Mr. MATHEWSON:

Q. Have you the figures here, Mr. Carter?

A. The amount drawn from surplus accounts to pay the dividends as indicated were, in 1899, $705,199.44 and in 1900 $1,116,633.85.

Q. Mr. Carter, yesterday there was put in evidence the record of assessments upon the six constituent companies which form the Consolidated Gas Company for special franchises in the Borough of Manhattan. Do you know whether either one of those companies was assessed for a special franchise in the Borough of Bronx, and if so, which one, and what amount?

A. There was an assessment of $20,000 against the Municipal Company in the Borough of the Bronx, but that there was a special franchise assessment of course, I don't know. I am not aware that that has——

Q. The amount is $20,000?

A. The amount is $20,000.

Q. And that $20,000 with the amount of the assessment for the six constituent companies, as stated yesterday, make up the total of $5,455,000 which you stated was assessments of an additional character?

A. Yes.

Q. Beyond those heretofore existing?

A. That is the case.

Q. In what way, if in any way, do the conditions under which gas is delivered to the city, differ from those under which gas is delivered to the consumers?

A. I am not aware that they differ in any conditions, Mr. Mathewson.

Q. They are made in the same manufacturing plants?

A. The gas is made in the same apparatus, distributed through the same mains, supplied in similar meters and in every other way the supply is identical to that of the consumers.

2198 Q. The conditions so far as you know, are no more favorable than in delivering to private consumers, are they?

A. Not at all.

Q. Complainant's Exhibit 86 shows "Active Meters on district average sales per active meter," and some other items. The question has been raised as to the 795.47 miles of mains shown in the corresponding Exhibit 168 before the Gas Commission. What was the heading of the column on Exhibit 168 before the Gas Commission in which the 795.47 miles appears?

A. Miles of active mains.

Q. And this Exhibit was prepared by you for the purpose among other things of showing the sales per mile of mains?

A. Precisely.

Q. And so mains which were not at that moment connected with services were eliminated?

A. Yes, sir.

Q. Are the balance the property of the company and so carried?

A. Yes, and liable to be put in commission at any time. That

happened to be the number of miles out of commission at that time, and it is a constantly changing element.

By Mr. Burr:

Q Is it not a fact that in the electric light business that a great reduction is made to a large consumer in the price of electricity—electric current supplied per kilowatt.

Mr. Mathewson: I object to that. The conditions are entirely different and it would not affect the question of law before the Master at all, whatever might be the case.

The Master: What is the point of it?

Mr. Burr: On the question of the supply of gas to the city, I claim that the city being the largest consumer and certain other elements entering into the question, it is entitled to a reduc-
2199 tion and has received a reduction and that situation is recognized for years, and it is recognized by the electric light companies in their sales for years.

Objection overruled. Exception.

A. I am aware of variations in the prices charged electric consumers, but I think that it is rather the period that the current is used in twenty-four hours that governs it rather than the volume of it. In other words, given a certain investment in the necessary plant and apparatus and distributing system to reach a customer, and without the storage facility which the gas companies have for storing their commodity, they recognize the advantage to them of having their current used a great many hours during the twenty-four over a short hours' use of it and they recognized that in the price to their consumers.

Q. Even to the extent of charging small consumers twelve cents per kilowatt and large consumers three cents?

Mr. Mathewson: Not twelve.

Mr. Kirby: Ten.

Q. Well, say ten. You do not require meter checking for the city supply, do you, as you do for the ordinary consumer?

A. Meter checking?

Q. Yes.

A. I don't quite understand your question, Mr. Burr.

Q. Meter reading?

A. Oh, precisely, the same meter reading in the case of the city as in the case of any other consumer.

Q. For the lamp-posts?

A. The gas supplied to the lamp-posts is supplied under contract, and does not come into the question at all, as I understand it.

Mr. Page: The city has to pay for it.

Mr. Mathewson: Yes.

2200 The Witness: Ought to have to.

Q. I asked you the other day for a transcript of the account in the ledger of the transactions in real estate since 1884?

A. That is practically prepared. It took a little time to dig that up, covering 20 years.

Mr. BURR: If it can be done, I would like to have the number of services in use December 31, for the years 1895, 1896, 1897, 1898 and 1899.

Mr. MATHEWSON: Requests were made not covering that period and we presented a list of the services, which Mr. Burr has. We prepared it at his request, 1903, 1904 and 1905, and I cannot undertake, now that we expect to close our case in a few minutes, to make up any more statements.

Mr. BURR: Then I assume you have supplied all the statements you intend to supply?

Mr. MATHEWSON: I stated the other day quite clearly.

The MASTER: Is that all Mr. Carter?

Mr. MATHEWSON: No.

By Mr. MATHEWSON:

Q. The delivery of electricity is to consumers in proportion to their consumption, and does not distinguish or discriminate, does it, as between the city and individual consumers?

A. No, sir, it does not.

By Mr. PAGE:

Q. You mean by that there is no provision in the law establishing a price that you can charge the city for the public lights, the electric lights?

A. There would not be one that was made voluntarily by
2201 the company as I understood Mr. Burr's question to convey. If there is such a provision——

By Mr. MATHEWSON:

Q. You are referring to the metered delivery of electricity?

A. I am referring to metered currents, yes, sir.

COLIN C. SIMPSON recalled.

Direct examination by Mr. MATHEWSON:

Q. As to the Consolidated Gas Company mains included in the 822 miles to which you have testified, are there in any case that you know of more than one line of main on each side of the same street?

A. In very few cases.

Q. You testified as to taking 90 per cent. of the pavement of New York as asphalt or new pavement, and you did not figure out exactly how much main of each size was under the new pavement or within the 10 per cent. of the old pavement. From your knowledge of the main system and of the streets, in your judgment is 90 per cent. upon the basis which you figure a fair, a law or a high estimate of the main value within asphalted pavement?

A. It is a very low estimate.

Q. In other words, the small sized mains are under what sort of

pavement, that is, a greater proportion as compared with the large size?

A. You would have to put it this way.

Q. Well, put it your own way.

A. That mileage of paved streets is mostly in thickly settled portions of the city where the most mains are, and the other portion of the city where there are many streets not under new pave-
2202 ments, in nearly every case there is only one main on the street, and where the new pavements come in there are generally two.

Q. Would you think the 90 per cent. estimate a conservative one?

A. Very conservative. My first intention was to make it 95 per cent.

Q. And if the mains were taken figured out, showing which were under asphalted pavements, is it your judgment that that figure would be raised or lowered?

A. I think the figure would be very close to 95 per cent.

Q. In figuring the cost of replacement to-day at $12,600,000 and over, did you take into consideration the obstructions offered by the present system and the electrical conduits of the trolley roads?

A. In no instance.

Q. The 10 per cent. which you added did not cover that?

A. No, sir. The reason for that was that I figured that the cost of the alterations for the mains along the line of the system were already paid for by the subway people, and the many thousands of dollars that had been expended for lowering mains under trolley roads had also been paid for by the trolley people.

Q. Then if you were in fact to replace to-day, taking into consideration those items that would add, would it not, a considerable sum to the cost of replacement?

A. A great deal of money.

Q. When you gave the figures for the tax report, were you informed that those figures were to go under the column headed "Cost of Reproduction, New?"

A. I was not.

Q. Were you aware of that fact?

A. I was not. In fact I never knew it at all until last January when I was in court and saw that paper produced here.

Q. The tax report?

A. The tax report.

2203 Mr. MATHEWSON: I desire to offer in evidence Section 522 of the Charter of the Greater New York, Laws of 1901, providing a penalty for failing to maintain a candle-power of 20 candles.

Received in evidence as Complainant's Exhibit 238, but not marked.

Mr. MATHEWSON: I also offer chapter 651 of the laws of 1866, being the Act to incorporate the New York City Mutual Gas Light Company.

Mr. PAGE: Objected to as immaterial and irrelevant.

Mr. BURR: I object to it as immaterial, irrelevant and incompetent,

and if allowed to go in we will be entitled to show, if we may, what transpired since, so far as that company is concerned.

The MASTER: I do not see that it is very material, but I will take it.

Received in evidence as Complainant's Exhibit 239, but not marked.

Both except.

Mr. MATHEWSON: That completes our direct case with the understanding, as I suppose, that the statements and figures which were testified to, introduced in our statements, have been verified by counsel for the defence, so far as they see fit, and that the fact that the figures are true statements from the original entries may be accepted subject to verification, the same as though the original entries were produced here.

Mr. BURR: That is your understanding?

Mr. MATHEWSON: I say I assume that is it. Is that correct?

2204 Mr. PAGE: We do not acquiesce entirely in that understanding.

Mr. BURR: It is not my understanding. I would suggest that we adjourn until to-morrow.

Adjourned to September 14, 1906, at 2 P. M.

Last Exhibits:

Complainant's 239.
State's W.
City's —.

2205 Circuit Court of the United States, Southern District of New York.

CONSOLIDATED GAS COMPANY OF NEW YORK, Complainant,

vs.

JULIUS M. MAYER, as Attorney General of the State of New York; WILLIAM TRAVERS JEROME, as District Attorney of New York County; FREDERICK E. GUNNISON, JOHN C. DAVIES, and LUCIAN L. SHEDDEN, Constituting the New York State Commission of Gas and Electricity, and THE CITY OF NEW YORK, Defendants.

Before Arthur H. Masten, Special Master.

NEW YORK, *September 14th*, 1906—2 o'clock p. m.

Met pursuant to adjournment.

Present: The Master, Mr. Mathewson, Mr. Garver, Mr. Page, Mr. Burr, Mr. Kirby.

2206 Mr. BURR: I am handed by counsel for complainant a statement purporting to be a statement of gas made for Consolidated Gas Company under agency agreement, net, for the months of November and December, 1905. I understood from counsel yes-

terday that he had furnished all the information which he intended to furnish, and I ask to have this marked for identification.

Mr. MATHEWSON: Do you offer it in evidence?

Mr. BURR: I asked to have it marked for identification.

Marked for identification, City's Exhibit 45.

Mr. BURR: At the conference which was held yesterday between counsel and the Master it was understood that to-day, whatever motions were to be made by the defendants, could be made with the understanding that those motions in formal shape might be submitted at a later date, and that an arrangement as to an adjournment would be made to-day. On behalf of the city I move for an order by the Master permitting an audit of the books of the complainant and for an inspection of its plant for the purpose of enabling the defendant, the City of New York, to properly define its action, and that request I understand will be joined in by the State.

Mr. PAGE: We join in the motion.

The MASTER: Well, I do not understand that I would have any power to grant any such motions as these that have been made. At all events I shall deny them, with exceptions to the several counsel.

Mr. BURR: On behalf of the city we move to dismiss the complaint on the grounds which I may be permitted to set forth in the formal application for that purpose.

The MASTER: Same disposition.

2207 Mr. BURR: And I further move on behalf of the city to strike out the testimony of the various witnesses adduced on behalf of the complainant, on the grounds to be hereafter stated in the formal motion.

Mr. MATHEWSON: I do not see how that motion can be made or considered in that form.

The MASTER: It cannot be passed on in that form. I should dislike to entertain any motion to strike out any part of the testimony without having specified exactly what was covered by the motion, and the grounds in detail. There were certain features in the complainant's testimony, as I recall it, to which that motion might perhaps be applicable. There were certain matters that were received subject to being connected later and with all rights reserved to the defendants to move to strike out testimony which was received at the time against their objections. Of course I cannot pass on their motion to strike out until I have looked into those matters fully, but I see no objection to letting Mr. Burr formulate his motion in writing, it being understood, of course, that nothing in connection with his motion shall operate to delay any proceedings or extend the time of adjournment or anything of that sort. How long do you want, Mr. Burr, to put that in writing?

Mr. BURR: The record is not yet complete showing the complainant's case, and of course that would be necessary before we could properly formulate all the grounds upon which I desire to make the various motions. I might inquire of the stenographer when he expects to have the exhibits furnished *in toto* to counsel for the defendants.

The STENOGRAPHER: Next Tuesday.

2208 Mr. BURR: I shall require about five days after that to get my motions in such shape as I desire to present them to the Master.

The MASTER: Of course if it should transpire that any part of Mr. Mathewson's case is stricken out in consequence of that motion, before his case can be deemed finally rested, he will be entitled to an opportunity to make good any deficiencies which will have to be on such an arrangement as to time as may be fair and right under the circumstances, and if you take additional time now to the extent you indicate for the purpose of preparing your formal motion it must be without prejudice to any of his rights.

Mr. BURR: I think that would be fair.

Mr. MATHEWSON: If the motion were made now and something were stricken out I should expect to fill the gap if any material gap was left. I do not know what the motion may be. I am unable to act.

Mr. PAGE: On behalf of the State I will say, I had understood that an arrangement was made yesterday that the motion to dismiss the complaint and the motion to strike out such portions of the proof as we deemed advisable were to be submitted in writing; there would be no meeting and no hearing upon it and entry upon the record. Of course if we had expected to present to-day the motion, we should have asked yesterday for a *single* extension or adjournment to allow us to go through the record and prepare our motion with some degree of care. I expect to make a motion to strike out certain portions of the testimony and also a motion to dismiss the complaint and had supposed it would be done in
2209 that way, that I would submit a motion in writing and serve the other side with copies of the motion.

The MASTER: I suggest that that be done without any meeting.

Mr. PAGE: Yes. And if the Master should strike out any portion of the testimony he could make such disposition as seemed just to him to all the parties, and if he should dismiss the complaint of course that would dispose of any other motions.

Mr. BURR: I understand we may submit these motions without a formal hearing?

The MASTER: Yes; sending a copy to the other side and a copy to this office by the end of next week.

Mr. PAGE: Of course that does not interfere with the time in any way, shape or manner.

Mr. MATHEWSON: I did not wish to interrupt Brother Burr's motions, but it seemed to me they were a little premature in view of the fact that we have not as yet rested our case, but we were to meet here to-day with a view of putting the record in such shape that we could rest it. I do not know that I have anything to offer that will affect his motions, and I have no objections to their standing as though made at the conclusion——

Mr. BURR: I certainly understood that the case was closed yesterday.

Mr. MATHEWSON: I don't see how you could after the discussion in the Master's room. We desire a ruling from the Master on one point to be given in advance.

Mr. MASTER: Statements or compilations were presented in regard to certain matters by the complainant from the books and records of the company with a view to facilitate the hearing all around,
2210 as I understood it, and they were received with the understanding that the defendants should have an opportunity by their accountants to verify the accuracy of the compilations by examining the books at the company's office instead of bringing them down here, and repeatedly when Brother Burr asked for various data he said he might not require the data if the examination of his accountants covered the point. The accountants for the defendants went to the company's offices; they were there for a long time and they completed their examination of the complainant's books for the purpose of verification on August 23, 1906, and they have not been there since. I understood it to be the arrangement that if the defendants were given this opportunity for verification that would dispose of their objection that the original books were not presented here, in lieu of the compilations, and we thought we were facilitating the hearing by that method, that having been found to be in previous investigations the only practical way to get at the result within reasonable time.

Mr. BURR: I dispute that statement.

Mr. MATHEWSON: Just a moment, I have not completed yet. This examination having been made by the experts of the defendants, no objections having been raised to these items, I would like the ruling of the Master as to whether the objections have not been complied with, or rather the conditions upon which the testimony was received. It seems to me that is a point on which we should have something on the record.

The MASTER: Now, Mr. Burr, what were you going to say?

Mr. BURR: The counsel has repeatedly stated what pre-
2211 vious investigations found was the proper thing to do. I know nothing of what previous investigations have found to be proper. What they did, not being in evidence here, can have no bearing upon the present situation. You remember that this inquiry had not been an hour in progress when I called at-ention to the fact that an audit of the books of the company and an inspection of the plant would facilitate a proper inquiry such as this was intended to be into the affairs of the company, and counsel for the complainant reminded me that if I desired to prove my case I must take and prove it in the legal way and they had no intention of entering into any stipulations whatsoever.

Mr. PAGE: Well, it seems to me, if the Master pleases, that it is proper we should make some statement as to what our accountants did do and then the record stands, if such be as the record discloses was the case and how we availed ourselves of it. If we should have gone farther I suppose we have got to take the responsibility, or if the ruling was not sufficient to meet the legal requirement the other side must take the responsibility. They have closed their direct examination and we closed our cross-examination, and as to the fact I am willing to admit that the accountants for the State have examined the entries appearing upon the ledger and journal of the Con-

solidated Gas Company for the year 1905 and for the nominal year ending October 31st, 1905, and found that the compilations made therefrom as appear upon exhibits 93, 94, 95 and 96 correspond with the books.

The MASTER: It may very possibly be that any statement
2212 in the nature of a ruling from me such as Mr. Mathewson requests would be properly deferred until the formal motions which counsel intend to make are submitted, for possibly the intention of counsel may be to include in those formal motions, especially the motions to strike out what Mr. Burr referred to, and all these questions as regards production of books and the inspection of the books at the office of the company. However, in advance of any such motion, I will state my position in the matter as now advised. Those statements in the nature of tabulations or compilations showing the substance of entries on the books of the Consolidated Gas Company were received as I think the record clearly shows, subject to examination and verification by the defendants. They were received with the express statement and recognition on my part, and on the part of counsel as well, I think, that they were not the best evidence and that under a strict application of rules of proof the complainant would be required to produce here the books from which the tabulations were made up, not only in order to establish the main propositions for which the complainant was contending, but also for the use of counsel in cross-examining. Of course it would have been possible for the complainant to introduce those tabulations in the first instance, calling some witness who could make proper proof that they were abstracts or compilations prepared by him showing the result of a long series of accounts, but the books necessarily must have been produced here to substantiate them in case counsel required. Now those books were evidently of such enormous bulk—I do not mean the individual volumes, but I mean the record of a year's business of a corporation as large as
2213 this was so voluminous that it would be manifestly very burdensome for counsel to examine them here and it would have protracted the hearings to an unwarrantable degree. Under those circumstances and for those reasons the arrangement was made which I assumed would, after it had been working awhile, prove to be a harmonious and satisfactory one to all counsel, that these experts should examine the books at the office of the company, calling for such details as they required. I stated repeatedly that if necessity for any particular book should be apparent and a foundation was laid for I should require its production and in so far as particular books were required they have been produced and the record so shows. I have been advised from time to time that the experts of the State have been in the office of the complainant, making these examinations, and that the experts for the city, as a matter of convenience to themselves and to avoid unnecessary duplication had deferred their examination until after the State's experts had finished, in the idea that possibly when the State's accountant had completed his work there would be very little independent work that the city's expert would want to do. Now there has been no case made out here

before me by application, formal or otherwise, for the production of any books or papers that have not been actually produced. I do not recall any such instance now, excepting the case of some pay-rolls which Mr. Burr called for and which I said I would not order produced unless some better reason was shown than had then been made apparent, nor has any application been made to me to make
2214 any order or take any other action based on the fact that the experts, had not been allowed every reasonable facility at the office of the company to make such examinations as they saw fit, and the fact that they have been now absent from that office and the hearing has been in progress for several weeks since and nothing heard on this subject rather inclines me to the view that the defendants have not suffered any especially trying hardship for lack of information as to this documentary evidence in the defendant's office and, therefore, my present view is that for those reasons I should be inclined to deny your motion to strike out this evidence in so far as it depends upon the competency——

Mr. PAGE: We had not made any such motion.

The MASTER: I understood Mr. Burr did.

Mr. BURR: Yes, I did.

Mr. PAGE: I understood this was a ruling for the advice and instruction of Mr. Mathewson as to where his case stood in the mind of the Master. Of course I am not offering stipulation on Mr. Burr's motion.

Mr. BURR: That is the ruling of the Master, and we will have to abide by it, I suppose.

The MASTER: Gentlemen, I think you are all perfectly protected on the record by exceptions, and everybody's position is perfectly plain. Mr. Mathewson proved his case in the way that commended itself to him, and everything has been made the subject of proper exception, and I do not think there can be any doubt about it.

Mr. PAGE: I think it fair that we should make that statement, that our accountants had been there, so there would be no question as to the fact.

Mr. MATHEWSON: If a motion were to lie or to be seriously
2215 considered now to strike out our evidence on the ground the original books have not been produced, then the whole purpose of the arrangement we have made with counsel would go for naught, and instead of having facilitated it for either of us, it would have been simply a waste of time. I could not have conceived that that had been the purpose of the arrangement, that in spite of any inspection the objection should be available for advancement that the original books had not been produced. The Master will remember that some of them were produced, and how it was perfectly apparent in reference to one or two of them that it would be impossible to make any progress if examination item by item were to be had before the Master. A half a day was consumed going over items in a single book, adding and subtracting. Naturally, viewing the stipulation as I did and other counsel of the complainant, we do not desire to leave the case in any doubt upon that subject.

The MASTER: Well, Mr. Mathewson, what is the situation? Do you rest?

Mr. MATHEWSON: Well, I am confident that an examination of the record will show that the purpose and effect is as I have stated. I will supplement that for a moment by asking Mr. Carter to take the stand and I will ask him some questions.

ROBERT A. CARTER, recalled for further examination, testified as follows:

By Mr. MATHEWSON:

Q. Did the experts for the city and State come to the office of the Consolidated Gas Company early in August and ask to ex-
2216 amine the books in relation to the statements which the complainants had put in showing the figures from which those tabulations and statements were made up?

A. Yes, sir.

Mr. PAGE: Am I to understand then that Mr. Mathewson refuses to receive the concession as to the facts that I have made?

Mr. MATHEWSON: No, I do not. I am simply asking this as a preliminary question to show other things.

Mr. PAGE: If he does, of course we will have that stricken from the record.

Mr. MATHEWSON: No, I do not reject that at all.

Q. What facilities were these accountants given for examination of the books showing the transactions of which such statements were compilations?

Mr. PAGE: That is objected to as immaterial and irrelevant and having no bearing upon any of the issues and in the light of the record, being entirely foreign to any inquiry before the Master.

The MASTER: Mr. Mathewson, I hardly think it profitable to go into that.

Mr. MATHEWSON: Very good.

The MASTER: Of course, I can simply indicate my views and sustain the objection, and the evidence can go in, but it seems to me that the record is all right as it stands.

Mr. MATHEWSON: With the Master's suggestion, I will not press this question.

Q. Have you here the original operating ledger from which the compilations of the results in 1905 were presented in Exhibit 94?

A. Yes, sir.

Q. Will you produce it?

A. I have the book here.

2217 Mr. MATHEWSON: This book is marked Complainant's Exhibit 97 for identification, and I offer it in evidence.

Book received in evidence and marked Complainant's Exhibit 97 in evidence.

Q. Have you the station records of the Consolidated Gas Company for 1905 of the material used, &c.?

A. Yes (producing books).

Mr. MATHEWSON: I offer in evidence the 14th Street station records produced by Mr. Carter.

Book received in evidence and marked Complainant's Exhibit 240.

Mr. MATHEWSON: I also offer in evidence the 42nd Street station record for 1905.

Book received in evidence and marked Complainant's Exhibit 241.

Mr. MATHEWSON: Of course I offer only the year 1905. Some of these books cover a longer period, that is, some portions of them. I also offer in evidence part of the 42nd Street records for 1905, which is contained in this volume.

Book received in evidence and marked Complainant's Exhibit 242.

Mr. MATHEWSON: I also offer in evidence the record of the 21st Street station.

Book received in evidence and marked Complainant's Exhibit 243.

Mr. MATHEWSON: I also offer in evidence the record of the manufacture of the 44th Street station for the year 1905.

Book received in evidence and marked Complainant's Exhibit 244.

Mr. MATHEWSON: Also the record of the 99th Street station for 1905.

Book received in evidence and marked Complainant's Exhibit 245.

2218 Mr. MATHEWSON: I also offer in evidence the portions of the sundry debtor's blotters Nos. 13 and 14, covering the year 1905, relating to the city's account and the sales of residuals, scrap and other material relating to the production of gas for that year.

Books received in evidence and marked Complainant's Exhibits 246 and 247.

Mr. MATHEWSON: I also offer in evidence that portion of Sundry Debtor's Ledger No. 3, relating to the accounts of the City of New York on the sale of residuals, scrap and other items relating to the production of gas for the year 1905, the volume being Complainant's Exhibit 100 for identification.

Book received and marked Complainant's Exhibit 100 in evidence.

Mr. MATHEWSON: I also offer in evidence those portions of Sundry Debtor's Blotters Nos. 11 and 12, relating to the same matters for the same period.

Books received in evidence and marked Complainant's Exhibits 248 and 249.

Mr. MATHEWSON: I also offer in evidence the portions of Sundry Debtor's Ledger No. 2 and Sundry Debtor's Blotters Nos. 15 and 16, relating to the same accounts for the year 1905.

Books received in evidence and marked Complainant's Exhibits 250, 251 and 252.

Mr. MATHEWSON: I also offer in evidence the Trial Balance Sheet

of the company in its original balance book No. 5, for October 1, 1905—This is found on pages 92, 93 and 94.

Books received in evidence and marked Complainant's Exhibit 253.

Mr. MATHEWSON: I also offer in evidence record of gas sales No. 5, so much of it as covers the sales for the calendar year 1905.

2219 Book received in evidence and marked Complainant's Exhibit 254.

Mr. MATHEWSON: I also offer in evidence the operating journal for the year 1905, being Complainant's Exhibit 98 for identification.

Book received in evidence and marked Complainant's Exhibit 98 in evidence.

Q. Mr. Carter, were the compilations and tabulations which are comprised in statements presented before the Master made from the books of the company in your control?

A. Yes, sir.

Q. Were they true and accurate compilations and tabulations from the books?

Mr. PAGE: I would object. It seems to me that this is going over the same ground we have been over before. It was testified they were made up as compilations from the books of the company, and he offered then in evidence.

The MASTER: That is sufficient, I think. I suppose Mr. Mathewson is asking that in view of the motion made by Mr. Burr.

Mr. MATHEWSON: I was not exactly clear whether I asked that question. I think I have before, but I repeated it for further assurance.

The MASTER: I will take it, although I think you asked it.

A. Yes, sir.

Q. I think you also stated you were familiar with the books and frequently tested them and that they were accurate statements of the accounts of the company?

A. If I have not already stated it, I state it now.

Mr. MATHEWSON: I would like to offer in evidence City's Exhibit 45 for identification, being the last two months of 1905.

2220 Paper received in evidence and marked Complainant's Exhibit 255.

Mr. MATHEWSON: C case is closed.

Mr. PAGE: If the Master please, I think that under the circumstances, my concession not having been accepted by the complainant, should be withdrawn and stricken from the record.

Mr. MATHEWSON: I do not think that, because I depended upon that in presenting these. You stated that a certain examination was made and I stated that I accepted that and from that point I desire to show certain other things.

Mr. PAGE: But instead of that you have gone on and put all your books in evidence.

Mr. MATHEWSON: Not instead of it at all.

Mr. PAGE: I do not wish to be precluded by any concession I made

to save you the trouble of doing that, from any rights I might have now that the books are all in evidence.

Mr. GARVER: Your concession would not affect the city. We put it in against both, of course.

Mr. MATHEWSON: I do not think the concession you made is at all prejudicial to the situation as I can see.

Mr. PAGE: But it is not well to cumber the record with the offer of a concession that is not accepted.

Mr. MATHEWSON: I stated expressly that I did accept it.

The MASTER: If the Senator on second thought wants to take back his concession and have it stricken from the record, he is entitled to do so. I do not think it is any different one way or the other. As you say, your concession did not bind Mr.

2221 & 2222 Burr. They had to do what they were going to do against Mr. Burr in view of his notice of motions. If you prefer it that way, it may be striken out.

Mr. MATHEWSON: Do you wish to withdraw it?

Mr. PAGE: Yes.

Mr. KIRBY: Will you note the time of adjournment?

The MASTER: Yes. At the request of the defendants, the hearing is adjourned to October 1st, 1906, at 11 A. M., which I believe was the date arranged.

Adjourned to October 1st, 1906, 11 A. M.

Last Exhibits:

Complainant's 255.
State's W.
City's 45.

2223 *The Corporation Counsel serves on the Attorneys for the Complainant herein, September 27, 1906, the following notice:*

On behalf of the defendant, The City of New York, I make the following motions:

I.

I move to strike out all evidence of the value of real estate at this present time, more particularly the testimony of Wheelock, as the basis of computation must be the amount invested in said real estate, that is, the cost thereof, and not the present value, where such present value is admittedly greater. That is to say, the complainant is not entitled to dividends on the appreciation.

II.

I move to strike out evidence of the value of all such real estate as is vacant, or not used in the manufacture of gas in Manhattan, by the claimant, more particularly as follows:

Rented Parcels.

No. 326 Avenue A.
No. 328 Avenue A.
No. 330 Avenue A.
No. 333 Avenue A.
No. 335 Avenue A, City lot occupied by foreman.
No. 329 Avenue A.
No. 605 West 44th Street.
No. 606 West 44th Street.
No. 608 West 45th Street.
No. 610 West 45th Street.
No. 421 East 60th Street.
No. 420 East 61st Street.
No. 222 West 65th Street.
2224 99th Street and First Avenue (part occupied by foreman).
325 Avenue A, between 17th and 18th Streets, Avenue B and Avenue C, eight City lots.
Between 18th and 19th Streets and Tenth Avenue and marginal street, five City lots.
South side of 111th Street, west of First Avenue, two City lots.
Shadyside, New Jersey.
One-half 41st Street Station.
Also all other parcels not actually used by complainant in the business.

III.

I move to strike out all deeds offered and received in evidence as to the title to Astoria property. All evidence as to moneys spent or to be expended thereon, on the ground that such property or money is not used in the manufacture of gas at the present time, and should not be included as part of the capital on which the plaintiff is entitled to dividends. Such investment in the property and plant at Astoria is not shown by complainants to be essential to the manufacture and supply of gas at the present time in the Boroughs of Manhattan and The Bronx, and is not so used at the present time and in no case should such investment be allowed as part of the capital prior to the time such plant is in operation.

And upon the further ground that such property is owned by and is for the use of a separate corporation, to wit, the Astoria Light, Heat and Power Company, not a party to this action.

Exhibits 50, 51, 52, 53, 55, 56, 57A, 58, 59, 61, 62, being deeds from various parties to the Astoria Light, Heat and Power Company.

Exhibits 54 and 60 being letters patent to the Astoria Light, Heat and Power Company.

2225 Exhibit 63, blue print of property conveyed to the Astoria Light, Heat and Power Company.

IV.

I move to strike out all evidence as to the value of "good will" or the "going value," on the ground that it forms no part of the

capital; and cannot exist with regard to a business that enjoys a monopoly, since where there are or can be no competitors, the value thereof ceases.

V.

I move to strike out all evidence introduced as to the cost of gas and the value of investment where the same consists of statements alleged to be taken from the books on the ground that the said statements are not shown to be correct transcripts or extracts of the books, etc., *to the knowledge* of the witnesses, or compiled by them and not the best evidence, but merely hearsay.

VI.

I move to strike out Plaintiff's Exhibit 70, which purports to be schedules of appraisement and valuations of the constituent companies forming the basis of consolidation, on the ground that it relates to plaintiff's machinery and equipment existing in 1884, much of which does not exist to-day, having been superseded and replaced, and relates to equipment which is out of date and not adequate for present purposes in the manufacture of gas on an economical basis, and further, said statement is not a fair statement of values of the property therein appraised, as it does not show on its face that the element of depreciation has been considered in giving the values therein stated; that it is not the best evidence of the value of
2226 the property therein appraised at that time, in that such values could and should be shown by the entries in the books of the respective constituent companies, with an additional allowance for depreciation, and that such appraisements do not represent the cost to the complainant of the property therein specified, but represent the estimate of the values of the property in 1884, which estimate is unfair and biased, and does not make allowances for the appreciation in the value of real estate and the depreciation in the value of the plant and machinery.

VII.

I move to strike out plaintiff's Exhibit 71, on the grounds stated in paragraphs V. and VI. and on the further ground that it includes and purports to be the value of a franchise at that time, which value, if it existed, forms no part of the capital to be used as a basis in determining the rate at issue in this proceeding.

VIII.

I move to strike out Exhibits 72, 73, 74, 75, 76 and 77 on the ground that such increases of stock are immaterial, irrelevant and incompetent and do not show necessarily any increase in the investment on which the Company is entitled to dividends, but which increases in stock have been used for other purposes not incident to the manufacture of gas at the present time in the Boroughs of Manhattan and The Bronx by the complainant.

IX.

I move to strike out plaintiff's Exhibit 78, which purports to be the real estate, plant, property and construction, as shown from the balance sheet of November 11, 1884, and December 31 of
2227 each of the following years, on the ground stated in paragraph V., and on the further ground that the figures for the year 1884, $37,971,419.01, are subject to the objection stated and referred to in paragraph VII., and upon the further ground that such Exhibit includes items and expenses not connected with the manufacture of gas by the complainant in the Boroughs of Manhattan and The Bronx.

X.

I move to strike out plaintiff's Exhibit 79 on all of the grounds set forth or referred to in paragraph IX. herein.

XI.

I move to strike out plaintiff's Exhibit 80, which purports to be a statement of assets and liabilities, on the grounds stated or referred to in paragraph IX.

XII.

I move to strike out plaintiff's Exhibit 81, which purports to be a statement showing the investments in the gas business, on all of the grounds set forth or referred to in paragraph IX., and upon the further ground that the following items in no wise enter into the investments of complainant for the purpose of the manufacture of gas in the Boroughs of Manhattan and The Bronx; "invested in gas manufacturing plant at Astoria, $556,000; invested in cartage plant, $50,000; proceeds from debentures, $12,717,494.64."

XIII.

I move to strike out plaintiff's Exhibits 85 and 86, on the grounds stated in paragraph V.

2228 XIV.

I move to strike out plaintiff's Exhibits 87 and 88, which purport to be certificates of incorporation of the Astoria Light, Heat and Power Company and the National Coke and Coal Company, on the ground that said companies are not parties to the present action and cannot be included in the capital of complainant.

XV.

I move to strike out plaintiff's Exhibit 89, which purports to be a comparatively condensed balance sheet, on grounds set forth in paragraphs V. and IX., and on the further ground that it contains securities of other companies not parties to this issue, amounting to $53,041,134.52, and securities of the Astoria Light, Heat and Power Company amounting to $5,560,000, and of the National Coke and Coal Company, $50,000.

XVI.

I move to exclude plaintiff's Exhibits 93 and 94, on the grounds stated in paragraph V, and upon the further ground that the items for coal and oil represent purchases from parties who are directly interested in the capital stock of the Gas Company, and that said items are not a fair estimate of the cost of coal and oil, and on the further ground that the statements include items for gas stoves bought, sold and leased, separately from production and sale of gas, and upon the further ground that the charge for street lamps is no part of the cost of the manufacture of gas, and on the further ground that the item of contingent expenses and depreciation, amounting to
2229 $1,114,236.00, is excessive and not warranted by the conditions and is no part of the cost of the manufacture of gas, and on the further ground that there are expenses for clerks and employees included in said statements, which persons rendered services to other companies and for other purposes not incident to the manufacture of gas by the Complainant in the Boroughs of Manhattan and The Bronx, and on the further ground that such statements include contributions to Employees' Aid Association, taxes and interest on taxes which have not been paid and which are the subject of litigation at the present time, all of which form no part of the cost of gas during the period in question; and on the further ground that the estimate of fixed charges, amounting to $936,883.24 does not represent the actual interest on charges pertinent to the investment of the complainant in the manufacture of gas in the Boroughs of Manhattan and The Bronx.

XVII.

I move to strike out plaintiff's Exhibits 95 and 96, on the ground stated in paragraph V, and on the further ground that such exhibits are made up of totals containing items in no wise connected with the manufacture of gas by the complainant in the Boroughs of Manhattan and The Bronx during the periods covered by said exhibits.

2230 *The Corporation Counsel serves on the Attorneys for the Complainant herein, September 27, 1906, the following notice:*

The defendant City of New York moves to dismiss the complaint of the complainant herein on the following grounds:

I. We submit that the complainant has wholly failed to prove its contention that Legislative enactment reducing the selling price of its gas to eighty cents per thousand cubic feet to private consumers and seventy-five cents per thousand cubic feet to the City of New York, is a practical confiscation of its property, in that it cannot manufacture and sell its commodity at such prices and render an adequate return to the capital invested in its business.

It appears from the testimony that the complainant is not only a manufacturer and seller of gas, but that the major portion of its invested capital is devoted to an investment in the stocks and bonds of other lighting corporations, owning them in entirety or so nearly

so as to be able to dictate their policies; it also loans from its ample funds to those companies and notably to one of them, the Astoria Light, Heat and Power Company, *without charge for interest;* it has furnished millions of its capital and is pledged to supply millions more for the construction of a gas plant in a locality where it has no legal right to operate itself, and as a result of all of these transactions, and by introducing statements covering all its operations, some of which are shown not to be remunerative, it has sought to prove that the purely gas making branch of its business will be unprofitable under the present law.

We are able, however, by the use of figures introduced by the complainant itself, which we accept as accurate only for the pur-
2231 *poses of this motion and deny for any other purpose, to show, that upon the basis of its operations for the year 1905, and considering its capital invested solely in the business of making and selling gas, it can supply gas at 80 cents per thousand cubic feet to private consumers and 75 cents to the City of New York, with a reasonable profit when all the circumstances and conditions are given due consideration.*

Investment in the Gas Business.

The first question to consider is the amount of money which the complainant has invested in its legitimate business of making and selling gas.

Complainant stated in Exhibit 80, under the heading, "Investments in the Gas Business," that it has so invested the sum of * * * $56,891,454.99. But that is manifestly incorrect, because it includes therein two items of its investment in the securities of other companies, namely, the Astoria Light, Heat and Power Company and the National Coke and Coal Company, the aggregate of these two items being $5,610,000.

Counsel for the complainant very properly stated (Testimony, page 1059) that,

"The amount invested in other securities we do not claim a right to earn upon from the consumer of gas."

Such is our own position and, however, for its own purposes of accounting, the complainant may see fit to treat the two corporations above referred to, the sum of $5,610,000 is, in law and in fact an "amount invested in other securities" hence, cannot be an investment in the gas making business of the complainant.

2232 The items on said Exhibit 80 of

"Material and Supplies"	$616,470.08
and	
"Due from Consumers and Others"	2,000,000.00

must also be eliminated from consideration, for the reason that they are much more than offset by the item on the other side of the account entitled:

"Accounts Payable and Accrued Charges"	$3,281,711.52

This latter item is not an investment of the complainant, nor a sum upon which any interest has to be paid.

In the ordinary course of its business it covers the cost of materials and supplies remaining on hand at the close of the year, together with a still greater amount of the same which it has converted into gas and sold; in any event, it is not an investment of the complainant, no interest has to be paid for its use and there is no good reason why it should be so treated, as, in effect, to charge the consumers of gas with a cost for interest which does not have to be met in the first instance by the complainant, nor to allow a profit to be made thereon.

Taking then the total assets shown by Exhibit 80 to have been invested in the gas business.....		$56,891,454.99
and deducting these items:		
Plant and Property, Astoria.....	$5,560,000.00	
National Coke & Coal Co.....	50,000.00	
Material and Supplies.....	616,470.08	
Due from Consumers and Others...	2,000,000.00	
		8,226,470.08
There is left as a remainder.....		$48,664,984.91

2233 From complainant's own showing, therefore, the total amount of the funds which it has raised from the sale of its stocks and bonds, which is now invested solely in the gas business and upon which it is entitled to earn an amount sufficient to pay whatever rate of dividend the Legislature and the Courts shall find to be reasonable; and such further sum, if any, as shall judicially be determined is wise and proper to be kept in a Sinking Fund for future contingent use, is less than $49,000,000.00.

That this is substantially the correct sum invested in the gas business we may readily substantiate by arriving at a result closely approximating this, from a different method of figuring, which perhaps may be more readily understood:

Assuming for the purposes of this motion only that the original capital of the Complainant Company was	$39,073,000.00
Add Debenture Bonds Issued in 1888.....	1,387,000.00
The Insurance Fund.....	286,809.84
Consumers' Deposits	904,520.07
Additions to Plant and Property in excess of the last three items.....	7,115,235.99
	$48,771,565.90

Secretary Carter testified (at pages 392 and 572) that the original capital provided for more than a million dollars of working capital and in one form or another it must still exist as such.

Exhibit 79 shows that from the date of its organization to October 31st, 1905, it had added to its permanent investment in plant and property,

The sum of $9,693,565.90

We have assumed, for the purpose of accounting, that the funds to pay for such addition came in part from the sources
2234 itemized and that the remainder came from surplus profits or from premiums received from the sale of its stocks and bonds, but, as a matter of fact, it is not important from what source the funds were derived.

All money received by the complainant goes into one treasury account and is finally, and we assume accurately, accounted for.

It will be seen, then, that one method of figuring

Produces	$48,771,565.90
And the other	48,664,984.91

But from either sum there must be a deduction for a matter which does not appear upon the books of the company, but which is in evidence, namely, the disposal of a portion of its property and plant to the City of New York, and hence its release from the capital invested in the gas-making business.

Not all of the property so condemned and taken over by the City of New York has had a price fixed upon it by the proper tribunal, but awards have been made upon the following property:

Land and structures at 111th Street.....	$365,000.00
Part of land and structures at 18th Street.....	485,748.00
Bulkhead property at 21st and 22d Streets.....	247,853.00
As to much the larger part of the property taken at 18th Street no award has yet been made, but an extremely conservative estimate is.....	672,952.90
A total of.....	$1,771,565.90
Deducting from the capital investment shown to be.	$48,771,565.90
The value of the property sold.....	1,771,565.90
There remains	$47,000,000.00

which is the utmost amount entitled to earn dividends from
2235 the gas business on the basis of the complainant's own figures.

Result of Gas Operations for the Year 1905.

No evidence has as yet been introduced which will show the exact cost of making and selling gas separate and apart from all the other business of the company, and we have no purpose at this time of making such a showing, but rather to follow the line adopted by the complainant, and consider as a whole its business for the year 1905.

On the one hand, we shall set down as receipts only those items shown by the complainant as being derived from the gas business, and as operating expenses shall allow those only which are to be fairly considered as a proper charge from the standpoint of the consumer.

Complainant's Exhibit 96 shows a total of receipts from "Gas Sales," $13,552,482.97.

As a matter of fact, these receipts were not all from the sale of gas, but were in part from the rent of gas stoves and for the maintenance and care of street lamps; there are items of income also pertaining to the gas business which in Exhibit 96 are included in "Miscellaneous Income."

There was sold in 1905 (see Exhibit 94) 13,283,163,767 cubic feet of gas, of which there was sold to the City an estimated quantity of 398,525,978 cubic feet, leaving for private consumers, 12,884,637,789 cubic feet.

The price in 1905 being one dollar per thousand to the latter and ninety cents to the former, we must deduct twenty cents and fifteen cents respectively to reduce the figures to those that would result from an enforcement of the present law.

2236

12,884,637,789 c. f. at 20 cents	$2,576,927.56
398,525,978 c. f. at 15 cents	59,778.90
Total	$2,636,706.46
Receipts (Exhibit 96)	$13,552,482.97
Deduct, as above	2,636,706.46
Receipts under present law	$10,915,776.51
To this should be added from "Miscellaneous Income":	
Rentals, wharfage, discounts, scowing, suspense accounts, etc.	172,710.53
Total income from investment in gas business	$11,088,487.04

From Exhibit 94 we take the following items of expenditures which enter into the cost of making and delivering gas, selling and collecting for the same:

Station cost	$3,455,091.37
Cost of gas manufactured under Agency agreements	997,039.89
Total distribution, less interest on consumers' deposits, which will be included in the general expense item of interest	1,589,690.67
	$6,041,821.93

This sum, reduced by repairs to gas stoves and by street lamp account ($345,213.44) we submit as the cost of making, selling and delivering gas, keeping the gas accounts and collecting the bills and based upon the quantity of gas sold, amounts to 42.88 cents per thousand c. f.

2237 The General Expense items, which we also take from Exhibit 94, are as follows:

General Office Expense (90%)	$305,992.36
Automobiles, (90%)	4,557.74
Advertising and Legal (90%)	95,220.02
Vacations and Sickness	8,175.20
Real Estate Rents	42,674.71
Gas Companies' Aid Society	6,413.99
Superannuation	14,943.86
Insurance	54,031.83
Renewals (Actual Exhibit L.)	232,219.67
Taxes	738,067.86
Interest	118,918.37
Total General Expenses	$1,671,215.61

Summary.

Gross Income		$11,088,487.04
Gas Cost	$6,041,821.93	
Other Expenses, Interest and Taxes.	1,671,215.61	
		7,713,047.54
New Earnings		$3,375,449.50
6% Dividend on Actual Capital Invested		2,820,000.00
Surplus		$555,449.50

The surplus may be carried in a fund to provide for all extraordinary renewals, repairs or contingencies, as to which testimony has been admitted and which fund is largely in excess of any sum which past experience has shown is needed.

We have treated the General Expense items shown in Complainant's Exhibit 94 with great conservatism in making a di-
2238 vision of the amount that should be borne by the capital of the company invested otherwise than in the gas business.

When it is considered that the complainant owns all or nearly all the stocks and bonds of the lighting companies in which it is interested, and with the unimportant exception of The Bronx Gas and Electric Company, controls all the other gas and electric light companies in the Boroughs of Manhattan and The Bronx, that it keeps close watch over their operations and dictates their policy, that its general officers give much of their time and attention to even the details of their business, the 10 per cent. of the three items "General Office Expenses," "Automobiles" and "Advertising and Legal," which in the aggregate amounts to only $45,085.57, will seem a

small enough amount to charge against the capital used for other than gas making purposes.

In the matter of taxes, which are shown in total on Exhibit E, and the detail of State taxes further shown on Exhibit M, we have charged the gas business as follows:

Tax Account.

Real Estate	$179,778.95
Special Franchise	406,909.23
Mains, etc., on Private Property	14.91
Proportion of State Tax, figured on the Basis of $39,078,000 Capital Stock Invested in Gas Business and $40,992,000 Capital Stock Otherwise Invested.	129,155.02
Local Tax on Personal Property, 25% of $88,839.00	22,209.75
	$738,067.86

We have not taken account of interest due on unpaid taxes; the testimony shows that only contested taxes are allowed to remain unpaid.

2239 If the company wishes to contest its tax bills, let it do so at the expense of the stockholders, who alone will benefit, if the contest proves successful.

Interest Account Entitled "Fixed Charges" in Exhibit 94.

Items from Exhibit I.

Bills Payable	$20,637.50
Debenture Bonds	69,488.07
Bond and Mortgage	129.54
	$90,255.11
Less Interest on Bank Balances of Working Capital	22,728.26
	$67,526.55
Add Item from Exhibit 94; Consumers' Deposits	51,391.52
Total	$118,918.37

It is not at all certain that the interest on "Bills Payable" is a proper charge to the gas account, but we have assumed it to save controversy over a small matter.

It is quite certain that the remaining items of interest shown on Exhibit I. have no connection with the gas business.

We have shown 6 per cent. as the proper amount of dividend to be earned, because in the absence of any other agreement the statutes of the State specify that to be the rate of interest governing dealings between its citizens.

Whether as dividend or interest, the rate of 6 per cent. is one that is gladly accepted by many thousands of investors whose
2240 investments are based upon enterprises far less stable than is that of the complainant and no enterprise which is limited to such a percentage of annual earnings on its capital may reasonably claim a confiscation of its property; in addition to this, we are fully persuaded that by the exercise of strict economy and the proper distribution of its expenditures the complainant may easily make a better showing than we have here done.

The charging of ten cents per thousand feet of gas sold, to a contingent fund, which appears in the accounts of the complainant last year, for the first time in its history and which thus abnormally increases the apparent cost of gas, is a matter that cannot, in good faith, be defended. Particularly absurd is one of the reasons given for the establishment of such a fund—that at some time in the future it is contemplated to break up one-half its plant and turn over its manufacturing business to another corporation operating in another borough.

If anything more illogical than to ask the consumers of gas in the City of New York to bear an expense of that kind has been introduced at this hearing, it has escaped our notice.

Equally fanciful and romantic are some of the other reasons given for the establishment of that fund.

Slow decay by electrolysis of the underground plant is one of the anticipated disasters; but the use of electricity in New York is no new thing, and the complainant's Superintendent of Mains has testified that he has never exposed nor removed a pipe that was not as sound as when it was laid; and some of them have been in the ground since 1825.

Nor can we agree with the Gas Commission, that any greater sum for renewals should be allowed than the actual cost of the same.

In addition to ordinary repairs, it is in evidence that extra-
2241 ordinary repairs and renewals, replacements and supercessions have been going on ever since the complainant acquired its property in 1884, and the result has been to bring the plant to such a state of perfection as to elicit testimony from the officials of the company that it cannot now be improved upon.

That being the case, it is reasonable to assume that the cost of further renewals must be constantly lessened, and only ordinary repairs, with an occasional renewal of minor parts of the plant, be expected in the future.

Much time has been consumed at this hearing in seeking to prove by expert testimony the considerable value of the real estate and plant of the complainant over and above its cost and book value. It would seem to be time and labor wasted; if proved, it would only show that the original investment of the company was not a bad one, and it is the investment of capital that we have to consider, not the fluctuations in value of the property acquired to serve the public in the business of making and selling gas.

We may only express the hope that the officials of the complainant

company will not forget what they have so diligently sought to establish, when next they are called upon by the tax assessor.

We are not especially concerned with the interests of that portion of the capital stock invested in the securities of other companies.

It is true that Exhibit B shows a return from such investments of less than 2 per cent. in 1905, but it is not true that no more than that small rate was earned.

One of the affidavits in support of our answer to complainant's bill stated that the accounts of the complainant company did not reflect its true earnings.

2242 As substantiating the truth of that affidavit, we refer to Gas Commission Printed Papers on Appeal, Exhibit 170, page 2197, in the case of Keys, complainant, which is here in evidence; that exhibit shows the earnings, expenses and dividends of the Consolidated Gas Company for a period of five years, from 1900 to 1904, and that the dividends paid were in excess of the net earnings for the same period, by the sum of $10,290,354.54.

A note attached to the same exhibit states, however: "The surplus earnings of other gas and electric companies, to which the Consolidated Company, as a stockholder, was entitled, in excess of amounts actually received, were merely sufficient to cover the deficits shown in these statements.

"But owing to the capital requirements of those companies, for extensions and improvements, the Consolidated Gas Company has thus far refrained from drawing such earnings.

"Its own accumulated surplus and reserve, to that extent, have therefore been for the time being diminished."

The complainant has a monopoly of the supply of gas in the territory in which it is engaged in business, in which territory the consumption of gas is greater than in any other territory in the United States, if not in the world.

An investment in this business under these circumstances, with economical and careful management, is as safe as an investment in government bonds and realizing a much larger return.

In the case of Stanislaus County *v.* San Joaquin C. & I. Co., reported in 192 U. S. Reports, Judge Peckham, at page 213, says:

"It is not confiscation nor a taking of property without due process of law, nor a denial of the equal protection of the laws, to fix
2243 water rates so as to give an income of six per cent. upon the then value of the property actually used, for the purpose of supplying water as provided by law, even though the company had prior thereto been allowed to fix rates that would secure to it one and one-half per cent. a month income upon the capital actually invested in the undertaking. If not hampered by an unalterable contract, providing that a certain compensation should always be received, we think that a law which reduces the compensation theretofore allowed to six per cent. upon the present value of the property used for the public is not unconstitutional. There is nothing in the nature of confiscation about it."

In the case of the Covington and Lexington Turnpike Road Com-

pany *vs.* Sandford, decided at the October Term, 1896, U. S. 164, page 396, it was held:

"It is proper to say that if the answer had not alleged, in substance, that the tolls prescribed by the Act of 1890 were wholly inadequate for keeping the road in proper repair and for earning dividends, we could not say that the Act was unconstitutional *merely because the Company* (as was alleged and as the demurrer admitted) *could not earn more than four per cent. on its capital stock.* It cannot be said that a corporation is entitled, as of right, and without reference to the interests of the public, *to realize a given per cent. upon its capital stock.*

* * * * * * *

"But that involves an inquiry as to what is reasonable and just for the public. * * * That inquiry also involves other
2244 considerations, such, for instance, as the reasonable cost of maintaining the road in good condition for public use, and the amount that may have really and necessarily been invested in the enterprise.

"*In short, each case must depend on its special facts;* and when a Court, without assuming itself to prescribe rates, is required to determine whether the rates prescribed by the Legislature for a corporation controlling a public highway are as an entirety so unjust as to destroy the value of its property for all the purposes for which it was acquired, *its duty is to take into consideration the interests both of the public and the owner of the property,* together with all other circumstances that are fairly to be considered in determining whether the Legislature has, under the guise of regulating rates, exceeded its constitutional authority and practically deprived the owner of property without due process of law."

It is well settled the rate fixed by the Legislature is presumed to be reasonable until proven otherwise.

This presumption the complainant has not overcome. It has entirely failed to prove the rate fixed unreasonable or confiscatory, and the motion to dismiss should therefore be granted.

I move to dismiss on the further ground:

II. The bill of the complainant herein should be dismissed for the further ground that it has failed to prove that its property has been confiscated within the provisions of the Constitution. Taking the figures introduced by the complainant, it does not appear from them that if it continues to operate its business that such business will be conducted at an *actual* loss, but merely at a reduced profit, and it is submitted that unless it can be shown that an actual
2245 loss will be inflicted upon the complainant there is no confiscation.

In the cases which limit the doctrine laid down in the case of Munn *vs.* Illinois, we do not find any clear definition of what constitutes confiscation until we reach the case of Cotting *vs.* Kansas City Stock Yards Co., 183 U. S., p. 79, in which Mr. Justice Brewer, giving the opinion of the Court, says at page 93 as follows:

"* * * The owner has intentionally devoted his property to

the discharge of a public service. * * * He deliberately undertakes to do what is proper work for the State. * * * It may be said that he voluntarily accepts all the conditions of public service which attach to like service performed by the State itself. He expresses his willingness to do the work of the State, aware that the State in the discharge of its public duties is not guided solely by a question of profit. It may rightfully determine that the particular service is of such importance to the public that it may be conducted at a pecuniary loss, having in view a larger general interest. At any rate, it does not perform its services with the single idea of profit. Its thought is the general public welfare. If in such a case an individual is willing to undertake the work of the State, may it not be urged that he in a measure subjects himself to the same rules of action, and that if the body which expresses the judgment of the State believes that the particular services should be rendered without profit, he is not at liberty to complain? While we have said again and again that one volunteering to do such services cannot be compelled to expose his property to confiscation, that he cannot be compelled to submit its use to such rates as do not pay *the expenses* of the work, and therefore create a constantly increasing debt which ultimately works its appropriation, still is there not force in the suggestion that, as the State may do the work without profit, if he voluntarily undertakes to act for the State, he must submit to a like determination as to the paramount interests of the public?"

2246

This is undoubtedly the test of confiscation of property where public service corporations are concerned; are the rates so low as to prevent the company from meeting its obligations? Unless this can be established there is no *taking* of property.

It is submitted that the Court must distinguish between *unreasonable* rates and *confiscatory* rates, as a rate may well be unreasonable without actually confiscating property within the meaning of Judge Brewer's definition. The province of the Court is only to determine whether or not the rate fixed by the Legislature is unconstitutional, in that it confiscates property, while it is the province of the Legislature in fixing the rate to determine whether or not the rate fixed is reasonable. If the complainant is aggrieved at the amount of dividends it is able to earn under the rate as fixed, it should address itself to the Legislature for the amending of such rate, and not address itself to the Court, unless it is prepared to prove the actual *taking* of property. Where, however, any profit, no matter how small, can be made under the established rate, the company has the alternative of applying to the Legislature for relief or retiring from the business.

I move to dismiss on the further ground:

III. The bill of the complainant herein should be dismissed for the further ground that said complainant has failed to introduce any evidence showing the true cost of its property, plant, etc., which figure must be taken into consideration in determining whether the rates established by the Legislature are confiscatory.

2247

That such value must be taken into consideration is determined, it is submitted, by the decisions in the various United States Supreme Court cases in which this question has been at issue, on the broad grounds of equity, although the language used in several instances shows the Court disregards *the cost* for the *fair value* of the property.

Careful consideration will show the reason for this, and that the defendants' contention is based on the identical grounds adopted by the Court in those cases, namely, that where the public has an interest in the business it is inequitable to allow a corporation operating the business to earn dividends on unfair investments.

In the case of Stanislaus County *vs.* St. Joaquin C. & I. Co., 192 U. S., p. 214, the Court, in taking the market value as distinguished from the actual cost as the basis, used the following language:

"The original cost may have been too great; mistakes of construction, even though honest, may have been made, which necessarily enhanced the cost; more property may have been acquired than necessary or needful for the purpose intended. Other circumstances might exist which would show the original rates much too large for a fair or reasonable compensation at the present time. Notwithstanding such facts, are the shareholders in the company to be forever enti-led *at* eighteen per cent. upon this cost, and does a reduction in amount, as provided for in the Act of 1885, take away property in violation of the provisions of the Federal Constitution? We think not. * * *"

2248 If the Court then refuses to allow a return on money *actualy* but *improperly spent*, it is submitted that it cannot by any distortion of reason permit a return on money *never* spent. It will be noted that the present case is the first one where the *value* of the property of the complainant *exceeds* the *original* cash investment, and presents a case quite the reverse of the former cases, but in which, on the broad grounds of equity, the Court must take as a basis the actual investment and not the actual investment plus the unearned increment; that is to say, the present value.

There is no evidence introduced by the complainant as to the cost of its property and plant prior to the year 1884, when the consolidation was effected. A moment's consideration will show that the 1884 values cannot be taken as the true cost, but that the actual cost of the six subsidiary companies must be determined. It is submitted that the complainant cannot by the subterfuge of consolidation in 1884 increase the true cost of its property and plant, and that the Court must, under the decisions, disregard all such increase in paper values in the same manner as the courts have heretofore construed money rashly or ill-advisedly spent.

There being no evidence as to the true cost of the plaintiff's plant and property on the record, the basis for the determination of the issue is not established, and the complainant's case fails.

2249 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John A. Shields, Clerk of the Circuit Court of the United States of America, for the Southern District of New York, in the Second Circuit, do hereby Certify that the foregoing (Vol. 3), pages, numbered from 1443 to 2248 inclusive, contain a true and complete transcript of the record and proceedings had in said Court, in the cause entitled Consolidated Gas Company, Complainant, Appellee, against Julius M. Mayer, as Attorney General, *et al.*, Defendants-Appellants, as the same remain of record and on file in my office. (Vol. 3.)

In Testimony Whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, in the Second Circuit, this 15th day of May, in the year of our Lord One Thousand Nine Hundred and eight and of the Independence of the said United States the One Hundred and thirty-second.

[Seal of U. S. Circuit Court, South. Dist. New York.]

JNO. A. SHIELDS, *Clerk.*

[Endorsed:] United States Circuit Court of Appeals for the Second Circuit. —— —— *vs.* —— ——. Transcript of Record from the Circuit Court of the United States for the Southern District of New York.